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UNIVERSITY OF DURHAM

**ISLAMIC BANKS AND SERVICE QUALITY: AN EMPIRICAL
STUDY OF THE UAE**

By

Obaid Saif Hamad Ali Al Zaabi

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**A thesis submitted for the degree of Doctor of Philosophy in
Islamic Banking and Finance**



**School of Government and International Affairs
Institute for Middle Eastern and Islamic Studies**

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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.

The research empirical depends basically on a sample drawn from the Dubai Islamic Bank, Abu Dhabi Islamic Bank and Sharjah Islamic Bank. 300 questionnaires were distributed to the customers at one branch of each Islamic bank in major cities in the UAE between October 2004 and March 2005. In addition, structured interviews were conducted by the researcher with officials from the UAE Islamic banks and with a number of *Shari'ah* board members, to support the findings of the study.

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 in 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.

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DECLARATION

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DEDICATION

I am very proud to dedicate this work to my late father and mother and to my family: Mona, Muhammed, Fatmah and Shaikhah.

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Chapter One

Introduction to the Study

1.1 Introduction

Islamic banks have come into existence in response to the need of Muslims for financial and banking services which are compatible with the principles and rules of Islamic Shari'ah. One of the earliest experiments in this field was in Egypt in the early 1960s, under the nomenclature of savings banks. This was followed by the so-called Pilgrim Management and Fund Board, or Tabung Haji, in Malaysia in 1963. However, the fully realized practical model of the Islamic bank only came about with the establishment of the Islamic Development Bank in 1975. This was to be followed in more recent times by a number of other pioneering banks, including the Dubai Islamic Bank, Kuwait Finance House and Faisal Islamic Bank.

Islamic banks are distinguished from conventional banks by being based on profit and loss sharing and on the elimination of the central pillar of Western financial theory – interest. Islamic banks also concern themselves with issues which have a societal and environmental impact, such as the implementation of technology and conventional banking deregulation, and they view international agreements – e.g., those of the World Trade Organization (WTO) and the General Agreement on Tariffs and Trade (GAAT) – as a challenge to improve the quality of banking services.

It is important to mention that the level of competition in the emerging markets is such that banks must continually ensure that they are maintaining their quality of service, strengthening customer loyalty and responding to the customer's need for market sector specialization.¹ Indeed, service quality now plays a key

¹ Schacherer, Mare, "A methodology approach to extending SERVQUAL to measure the internal service quality between employer and employee", DBA, *Anglia Business School*, Unpublished Research Paper no. 3, 2002; and Lepak, Greg M., "A Bayesian approach for analyzing the services of banking institutions", *International Journal of Consumer Affairs*, Vol. 32, Issue 1, Summer 1998, pp.121-146.



role in defining customer segmentation, advantage and expectations.² While the "high tech" concept has lost its importance, service quality – "high touch" in particular³ – has become a standard element in all business firms and is essential for ensuring competitive advantage, corporate profitability and survival in general. Academic studies now confirm that there is a positive relation between quality and economic factors such as return on investment, industry growth and the cost-effective element.⁴ Consequently, the priority of research today must be to understand the nature of service quality and to discover ways in which to achieve a high level of service as seen from the perspective of the customer.⁵ This is confirmed by a (PIMS) study in which 1200 firms agreed that the relation between profitability, high market share and cost, on the one hand, and the high level of service quality, on the other, was very strong.⁶ Moreover, studies also prove that paying proper attention to quality ensures strategic benefits such as a high market share, high returns on investment, lower manufacturing costs and improved productivity.⁷

Islamic banks must therefore be alert not only to the existence of competition but also to the need for consolidating their position by diversifying banking products and providing a high quality of service.⁸ Islamic banks are growing fast in Islamic countries and in the West.⁹ However, they face tough competition in the United Arab Emirates market from both conventional and Islamic banks.¹⁰

² Berry, Leonard, L., *On great services: a framework for action*, The Free Press, New York, 1995, p. 55.

³ 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 in the Kuwait Finance House", *International Journal of Islamic Financial Services*, Vol. 3, No. 4, April-June 2001, Available from: <http://www.islamic-finance.net/journal.html>, [Accessed 25 May 2004].

⁴ Le Blanc, Gaston and Nha Nguyen, "Customer's perceptions of service quality in financial institutions", *International Journal of Bank Marketing*, Vol. 6, Issue 4, 2001, pp. 7-18.

⁵ 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*, Second Edition, The Dryden Press, Florida, 1992, p.522.

⁶ Aaker, D. A., *Obtaining a sustainable competitive advantage—differentiation*, Marketing Management-Selected reading, DEC, The University of Southern Queensland (ed.), Toowoomba, 1995, p. 210.

⁷ 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, pp.55-68.

⁸ Ibid. pp.55-68.

⁹ Cowton, C.J., "Integrity, responsibility and affinity: Three aspects of ethics in banking", *Business Ethics: A European Review*, Volume 12, No. 1, January 2003, Blackwell Publishing Ltd, Oxford, UK, pp. 393-400.

¹⁰ 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.

For instance, conventional banks strive to keep their present market share and to increase it by adopting aggressive strategies: for example, by offering Islamic financial products (Citibank, Barclays, HSBC Middle East and, recently, in the UAE market, Mashreq bank).

Naser and Mountinho identified six sources of competition confronting Islamic banks:– existing competitors; customer negotiating power; investor and depositor negotiating power; new entrants; product/service substitutes;¹¹ and culture awareness.¹²

The argument is that it is incumbent upon Islamic banks to devise innovative methods of attracting prospective customers, whether individuals or companies, at a time of intense competition with conventional banks in an open market. In addition, service innovation and customer satisfaction need to be given attention by Islamic banks during the current decade. The ways of achieving this end are to predict the needs of customers and devise new ways of satisfying these needs through the regular measurement of customers' impressions of the quality of the services on offer. This is also necessary to enable Islamic banks to remain competitive and to hold on to their customers in addition to achieving a balanced rate of growth.¹³

In conclusion, if they are to be able to obtain a competitive advantage and compete in the UAE market, it is very important for UAE Islamic banks to evaluate the quality of service provided to their customers, to make the maximum efforts to enhance it, and to reach at least the level of conventional banks (which create a highly competitive and aggressive environment).

1.2 Research Questions

There is a pressing need to conduct a number of studies to reinforce the concepts relating to the quality of service and its their application in a variety of environmental circumstances and to a variety of services. Studies undertaken

¹¹ 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.

¹² Naser, Kamal et al., "Islamic banking: a study of customer satisfaction and preferences in Jordan", *International Journal of Bank Marketing*, Vol. 17, Issue 3, 1999, pp. 135-150.

¹³ Naser, Kamal and Luiz Montinho, op. cit., pp. 187-203.

by both academics and practitioners in the field indicate that a service quality strategy has a strong correlation with financial performance, manufacturing costs, customer satisfaction, customer loyalty, customer retention and the success of a marketing strategy. However, there is an urgent and insistent need to develop a standard method of measuring service quality performance in the banking industry.¹⁴

A few studies have been conducted to measure service quality in Islamic banks: for instance, Motawa and Al-Mossawi, Naser and Montinho, and Al Watan used the SERVQUAL service quality measurement model (originally devised by Parasuraman et al.) to measure service quality in Jordan, Qatar, Bahrain and Kuwait.¹⁵ The common feature of these studies lies in their attempt to test the reliability of SERVQUAL and to measure the overall level of service quality in particular countries. Other studies, however, stress that compliance with Islamic Shari'ah is the critical antecedent for judging the perceived service quality of an Islamic bank¹⁶, while the names and reputations of the scholars on the Shari'ah board are the ultimate factor influencing the choice of customers¹⁷, while Naser et al. believe that image, reputation and confidentiality are the most important antecedents in Islamic banks.¹⁸

Othman and Owen attempted to measure the service quality of the Kuwait Finance House (KFH) in the state of Kuwait. Their modification of the SERVQUAL model is called the CARTER model and consists of six dimensions:– Compliance, Assurance, Reliability, Tangibles, Empathy, and Responsiveness.¹⁹ The compliance dimension which they added to the original

¹⁴ 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. 407.

¹⁵ Metawa, Saad A. and Mohammed Al Mossawi, "Banking behavior of Islamic bank customers: perspectives and implications", *International Journal of Bank Marketing*, Vol. 16, Issue 7, January 1998, pp. 299-313.

¹⁶ —, "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.

¹⁷ Wilson, Rodney, "The evaluation of the Islamic finance system", Archer, Simon and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromony Books and AAOIFI, London, 2004, p.31.

¹⁸ Naser, Kamal, et al., "Islamic banking: a study of customer satisfaction and preferences in Jordan", *International Journal of Bank Marketing*, Vol. 17, Issue 3, 1999, pp. 135-150.

¹⁹ 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 in the Kuwait Finance House", *International Journal of Islamic Financial services*, Vol. 3, No. 4, April-June 2001, Available from: <http://www.islamic-finance.net/journal.htm>, [Accessed 25 May 2004].

SERVQUAL model consists of four antecedents: namely, compliance with Islamic Shari'ah; whether or not interest is involved; availability of Islamic financial products and free loans; and availability of profit-sharing products.

Al-Tamimi and Al-Amiri measured the service quality of two Islamic banks operating in the United Arab Emirates (UAE). They used the original SERVQUAL dimensions and statements and found that empathy and tangibles are the critical dimensions for the customers of those banks. In addition, the study clearly indicates that the number of years' dealing with a bank, age and education have a considerable influence on customer evaluation of service quality. However, the main criticism directed at their study concerns the use of the original SERVQUAL model, which many later studies have described as not generic. In addition, the study centred on two Islamic banks only and covered a limited number of branches, and thus the results of the study cannot be generalized.²⁰

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.²¹ 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?

²⁰ Al-Tamimi, Hassen 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.

²¹ Zeithaml, Valarie, et al., *Delivering quality service: Balancing customer perceptions and expectations*, New York: The Free Press, 1990, p.131.

- 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?

1.3 Significance of the Study

In general, the significance of the study stems from its effort to shed light on the nature of Islamic banks and the challenges confronting them in the current circumstances of open markets and globalization. Service quality is related to cost, profitability, customer satisfaction, customer retention, marketing success and high financial performance. Also, positive word of mouth recommendation is considered to be the key factor for success in the banking sector.²²

Previous studies concentrated on banking regulations and the operational side of Islamic banking; in doing so they disregarded the marketing strategy of those banks. Thus, the significance of this study relates to its empirical approach to measuring the perceived service quality level of Islamic banks in the UAE which is considered as a competitive advantage in the market. The study also identifies the most important services quality dimensions, to which these banks

²² Buttle, Francis, "SERVQUAL: Review, critique, research agenda", *European Journal of Marketing*, Vol. 30, Issue 1, 1996, p. 65-75.

must pay more attention, and the ways in which those service quality dimensions are developed and adapted in the marketing mix and sale strategies and customized to satisfy customers.

At the practical level, the significance of the study lies in its attempt to help the managements of the UAE Islamic banks to assess the current level of service quality of their banks, in order to eliminate defects and to improve the service quality offered to their customers.

1.4 Objectives of the Study

As can be seen, there are many issues that need to be addressed in order to ensure that Islamic banks operate more successfully in the present competitive environment. In essence, the general aim of the study is to use the modified SERVQUAL model presented by Parasuraman et al. and apply it to UAE Islamic banks to model the behaviour of customers and, in particular, to identify those attributes that make the largest contribution to explaining the perceived level of service quality of the UAE Islamic banks. In order to achieve the study's objectives, the following techniques will be adopted:

- i. Conducting questionnaire.
- ii. Conducting structure interview.
- iii. Conducting empirical analysis.
- iv. Conducting financial analysis.

1.5 Study Variables

Parasuraman et al., the founders and developers of the SERVQUAL model, had themselves pointed out that SERVQUAL could be adapted to suit specific research needs and the nature of the industry in question, as the model provides only core evaluation criteria of specific service quality.²³ In this regard, they stated: "the specific evaluation criteria may vary from service to service".²⁴

²³ Buttle, Francis, "SERVQUAL: Review, critique, research agenda", *European Journal of Marketing*, Vol. 30, Issue 1, 1996, p. 65-75.

²⁴ Zeithaml, Valarie, et al., *Delivering quality service: Balancing customer perceptions and expectation*, New York: The Free Press, 1990, p. 20; and 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.

In addition, Dectchin and Oakland stated that "there are several dimensions, rather than a single one, which together determine consumers' perceptions." They also recommended studying those dimensions in order to define them and measure their effect on service quality.²⁵ Also, Carman suggests that each specific industry has different dimensions, and even the original SERVQUAL model is not generic, and that therefore the dimensions and their antecedents, which form the service quality level, differ according to the nature of the business.²⁶

Regarding this issue, other studies in the field of service quality measurement (e.g., those of Babakus and Bollor, Babakus and Mangold, Carman and Gronroos and Lewis) established that the number of dimensions required for measuring service quality for different types of industry differs according to the nature of that particular business.²⁷

Following the findings of a number of studies of service quality in the field of Islamic banking (such as those of Motawa, Naser and Montinho, Naser et al., Othman and Owen and Al-Tamimi and Al-Amiri), the variables used in this study will consist of the original SERVQUAL dimensions²⁸, in addition to a set of variables developed to represent the nature of Islamic banking, in the measuring model of perceived service quality in the UAE Islamic banks, as illustrated in Figure 1.1

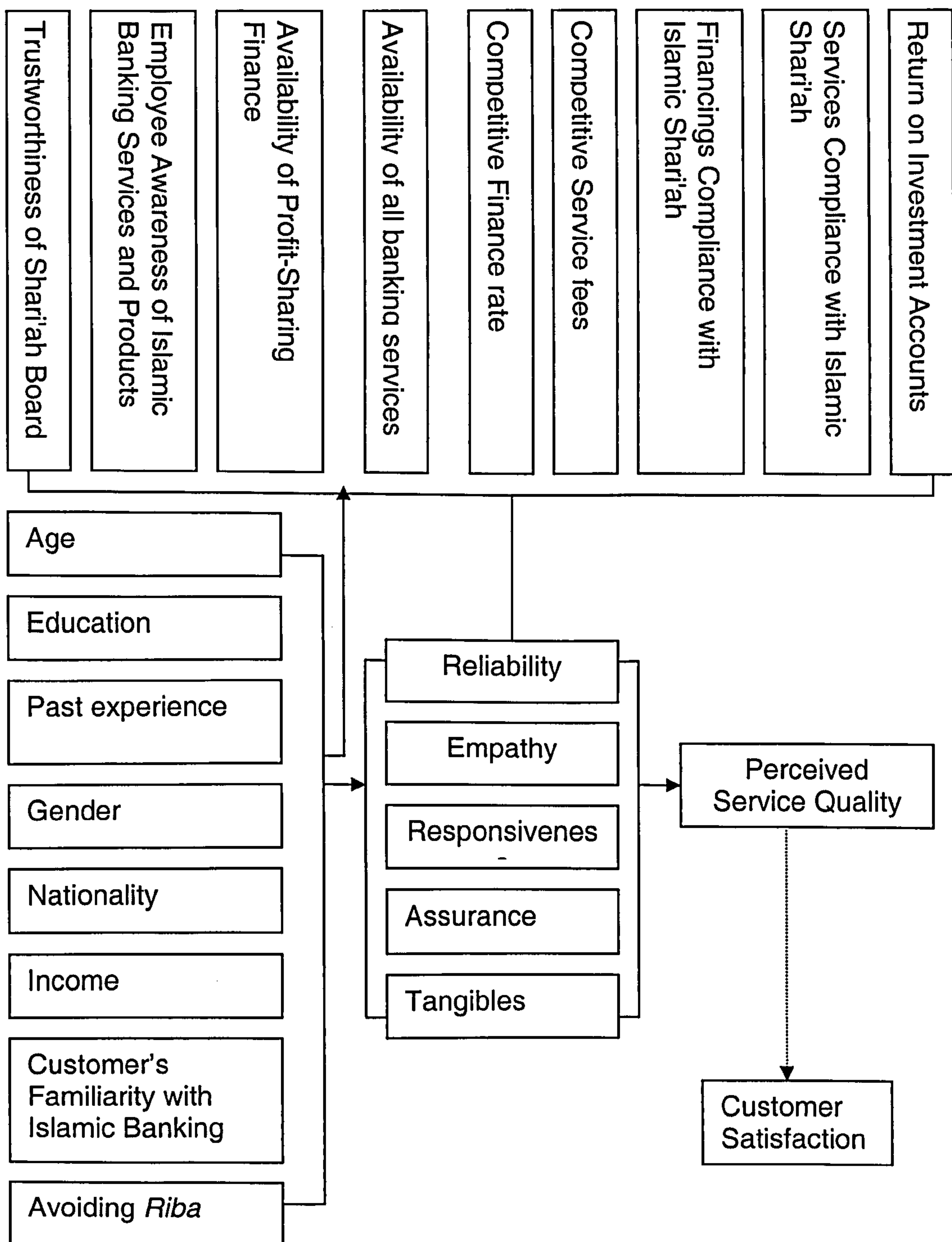
²⁵ Dectchin, John A. and John S. Oakland, "Total quality management in services", *International Journal of Quality and Reliability Management*, Vol. 11, November 4, 1994, pp. 6-28.

²⁶ 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; and Nel, Deon, et al., "The SERVQUAL instrument: reliability – validity in South Africa", *South Africa Journal of Business Management*, Vol. 28, Issue 3, September 97, pp.113-133.

²⁷ Buttle, Francis, "SERVQUAL: Review, critique, research agenda", *European Journal of Marketing*, Vol. 30, Issue 1, 1996, p. 65-75.

²⁸ Zeithaml, Valarie, et al., *Delivering quality service: Balancing customer perceptions and expectation*, New York: The Free Press, 1990, p. 131.

Figure 1.1 Measuring the Perceived Service Quality of Islamic banks



1. The SERVQUAL dimensions which the customer takes into account when assessing service quality are as follows:

- A. Tangibles, which means the extent to which equipment, material and technological facilities, buildings, etc. are available;
- B. Reliability, which refers to the extent to which the organization is capable of fulfilling the promised service in an exact way;

- C. Responsiveness: that is, the extent to which the organization is willing to help customers and offer a quick and excellent service;
 - D. 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;
 - E. 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.
2. The Islamic banking variables include the extent to which service providers demonstrate the best level of *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.
3. Variables that affect customers' attitudes when they judge service quality include:
- A. The variables of demographic characteristics of customers such as age, education, gender, nationality and income, marital status, profession and work type;
 - B. The variable of the number of years of dealing with Islamic banks;
 - C. The variable of the customer's familiarity with Islamic banking products and services.
 - D. The variable of avoiding interest in Islamic bank transactions (*riba*).

1.6 The Limitations of the Study

In view of the fact that the study will examine the perceived service quality of Islamic banks operating in UAE, and taking into account the constraints of time and cost, other topics pertaining to Islamic banks, such as religious duties and community obligations, will not be a focus of this study. In addition, since the objective of the study concerns the operational aspects of Islamic banks, together with the testing of the service quality of those banks from their customers' perspective, the study will avoid an in–depth analysis or a historical account of Islamic jurisprudence. Instead, the study will attempt to evaluate the

experience of Islamic banks in the UAE in general. Therefore, the study will deal with Islamic banks that have branches distributed in the United Arab Emirates, and will not address holding establishments of Islamic financing which are operating internationally.

1.7 Outline of the Study

The study is organized as follows:

Chapter1: Introduction.

Chapter 2 (Service Quality Strategy) This chapter introduces the reader to the most current definitions and concepts found in the literature relating to service quality in business firms in general and in banking in particular.

Chapter 3 (Service Quality Measurement Model) presents the service quality measurement models while focusing on the definitions and terms of SERVQUAL, the model which is used in this study to measure the customers' perception of the level of service quality in the UAE Islamic banks.

Chapter 4 (Islamic banking in the UAE) sheds light on the development of the Islamic banking system and the performance of Islamic banks in the UAE. Also in this chapter, the most important characteristics of Islamic banking are identified, and lastly, an evaluation of the Islamic banking experience in the UAE is provided.

Chapter 5 (Financial Analysis of the UAE Islamic banks) presents an analysis of the financial performance of the UAE Islamic banks in which several financial measures are used to measure growth, profitability, liquidity and capital strength. In addition, a SWOT analysis is carried out in order to highlight the strengths and weaknesses of the financial performance of the UAE Islamic banks.

Chapter 6 is designed principally to explain the research methodology that will be used by the researcher to conduct the empirical study.

Chapter 7: This chapter contains the descriptive analysis and tests of the hypotheses.

Chapter 8 presents a discussion of the data analysis and the findings of the study.

Chapter 9 (Conclusion and Recommendations) presents the main findings of the research and it also includes the conclusion and recommendations relevant to the central concerns of this study, and to future research in the field.

Chapter Two

Service Quality

2.1 Introduction

The vital part played by services in the American economy is considered the main factor contributing to the new importance attached to service quality at the level of businesses and society. Another contributing factor is the evidence that offering a high quality of service is a winning competitive strategy for companies. The aim of achieving excellence in service delivery dominates the thinking of several leading companies: for example, McDonalds, Federal Express, American Airlines and American Express.

The motto which encapsulates excellence in services is *Everyone a Winner* – customers, employees, management, shareholders, community and state – because everyone, directly or indirectly, really does benefit from high standards in services.

Adopting a strategy for service quality is essential. Indeed, it is the most effective way to manage any business, having an effect similar to, or even greater than, adopting a cost synergy approach, outsourcing organizational expertise or achieving brand equity.²⁹

A good quality of service gives a competitive advantage to any business. However, it is particularly important for banks.

This chapter is divided into five sections:–

1. General Characteristics of Service Necessary for Measuring Quality
2. Definitions of Quality and Service Quality
3. The perception of Service Quality
4. Service Quality Expectation
5. Service Quality Models

²⁹ Robert, Molly Inhofe and Brent M. Wren, "Service quality as a competitive opportunity", *The Journal of Services Marketing*, Vol. 12, No. 3, 1998, pp. 223-235.

6. The Relationship between Service Quality and Customer Satisfaction
7. The role of employees' empowerment in Successful Service Quality
8. Reasons for the increased attention being paid to service quality

2.2 General Characteristics of Service Necessary for Measuring Quality

Many studies have defined service as a set of intangible activities that exist as a result of the interaction between customer and service provider in addition to the material resources and the organizational system. For instance, service has been defined as work performance or "deeded act or performance",³⁰ where the service company as an organizational system consists of sophisticated skills and facilities, and the benefits are provided to the customers in the form of using or leasing facilities, professional advice, and maintenance.³¹ Another example comes from Kotler and Armstrong, who defined service as "an activity or benefit that one party can offer to another that is essentially intangible..."³² In his study, Palmer noted that service is intangible because, unlike goods, service has no physical presence that may be measured and this, Palmer believes, makes the customer highly uncertain about choosing between two competing services.³³

In view of the fact that services are intangible, the preservation of competitiveness on a permanent basis is impossible. This is because the innovation of new concepts and designs of service will most probably be picked up and imitated quite quickly by competitors. In addition, a customer wishing to evaluate service quality depends on tangible characteristics such as delivery speed, customization, and consistency; therefore, confidence and trust are very

³⁰ Lovelocke, Christopher H., "Classifying service strategic marketing insights", John E. G. Bateson (ed.), *Managing service marketing: Text and readings*, Second Edition, The Dryden Press, Florida, 1992, p. 70.

³¹ Juran, J.M., *Juran's quality control handbook*, Frank M. Gryna (ed.) Fourth Edition, McGraw-Hill Book Company, England, 1988, p. 33.5.

³² Zeithaml, V. A., et al., *Delivering quality service: Balancing customer perceptions and expectation*, The Free Press, New York, 1990.

³³ Palmer, Adrian, *Principles of service marketing*, Dementfort University, McGraw-Hill Book Company Europe, Berkshire, England, 1994, p. 1.

important factors to be considered in order to measure an intangible service such as banking.³⁴

However, although intangible, service undoubtedly possesses particular characteristics, as follows:–

1. Service is not storable (has perishability). The opportunity to sell or buy service can thus easily be lost. In view of this, Palmer argues that the company, in its efforts to tackle this problem, should depend on marketing strategies such as pricing and promotion. Services are also not storable because the process of delivery is carried out from person to person. Since there is a direct connection between a service provider and a customer, their relationship needs to be based on mutual trust and commitment.³⁵
2. Service is inseparable from production, since the production and the consumption of the service occur at the same time and in the same place: that is, the customer is involved in service production. It is therefore very difficult to centralize the mass production of service. Many service providers are responsible for marketing and production at the same time.
3. Service has variability (Palmer). This feature reflects the level of difficulty in controlling and monitoring the service processes to ensure that they meet the standards set by management.
4. Service cannot be easily inspected or examined because it depends largely on human interaction and expression.
5. Service does not have a limit and cannot be determined before it is handed over. It thus depends largely on the customers' response in a particular situation, which is a moment of truth and a revelation of human attitude – matters of high importance to the service industry.³⁶
6. Service involves ownership, in that the service itself cannot be owned, but the right to direct the service process is owned instead.³⁷

³⁴ Yilmaz, Hakan, *Identification of critical service intangibles for organizational repurchase decisions*, Available from: www.engineering.uow.edu.au/resources/hakan/gthesis.html, [Accessed on 04/February/2004].

³⁵ Shields, O. P., "Service quality and academic advising: Practicing what we preach", *Southwestern Marketing Association, Advance In Marketing*, 1995.

³⁶ Wille, Edgar, *Quality: achieving excellence*, Century Business, London, 1993, p. 103.

³⁷ Palmer, Adrian, *Principles of service marketing*, Dementfort University, McGraw-Hill Book Company Europe, Berkshire, England, 1994, p.3.

Furthermore, Zeithaml et al. found that service has unique features that distinguish it from the product being sold. These features are:–

1. Intangibility (in that service cannot be stored or protected through patents).
2. The difficulty of displaying or communicating.
3. The difficulty of defining the price of the service.

Another feature is heterogeneity, which means that, since service cannot be inventoried, it is very difficult to set standards for service quality control.³⁸ In the same context, Zeithaml has observed that services cannot be evaluated prior to their use - “search characteristics”. The customer, according to Zeithaml, must rely on his or her experience of the service itself – “expertise characteristics”. However, as a result of his or her inexperience in relation to certain specialized services (e.g., administrative and professional consultancies), the customer may often be unable to reach an objective judgment during, and even after, the service delivery process.³⁹

Tangible products have only a limited number of characteristics and so it is possible to make an accurate judgment concerning their quality. In contrast, services possess defining characteristics that are not easy to distinguish or identify. An example of this is the concept of customer expectations, for which there are numerous definitions. A concrete example of this would be the degree of contact that a service provider in a restaurant is expected to show. In the world of services, the customer’s role in the interaction process cannot be separated from the production process.⁴⁰

Additionally, the buyer frequently influences the service production process, as, for example, when a customer provides the hairdresser with particular instructions, or provides an accountant with particular documents. In such

³⁸ Zeithaml Valarie A., et. al., "Problems and strategies in service marketing", John E. G. Bateson (ed.), *Managing service marketing: Text and readings*, Second Edition, The Dryden Press, Florida, 1992, p. 50.

³⁹ Zeithaml, Valarie. A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990, p.2.

circumstances, it is believed that the customer has an influence on the quality of service delivered.⁴¹

In the same context, Kotler and Levy view services as having essential characteristics, such as intangibility and inseparability.⁴² Therefore, a manager charged with the responsibility of marketing services should try to make the delivered service more tangible to the customer. In addition, services are inseparable and there exists much variety, and many clashes and contradictions, among them.⁴³

Juran describes the service of a company as a direct sale to, and contact with, users, in circumstances where a huge number of individual transactions give the company the chance to obtain feedback about its service quality. He states that time is an effective element if a service is provided on demand and promptly to meet the customer's need. On the other hand, the benefits of a service are not physically storable or transportable, and the output and the delivery occur at the same time.⁴⁴

Finally, the leadership of a service provider must have special characteristics that distinguish it from other types of leadership. Thus, service leaders should have a clear vision of the service they provide. They must believe that profitability can only be achieved by embracing the service strategy and that this strategy is a never-ending journey. They must also attend to detail, aim at producing a system that has no defects, and always work to improve reliability.⁴⁵

Service leaders always practise their leadership skills in the field and this enables them to communicate well with their customers and obtain feedback

⁴¹ Haksever, C. et al., "Service quality for small firms: Can the gaps model help?", *21st Annual Conference*, Orlando, February 5-8, 1997.

⁴² Kotler, Philip and S. J. Levy, "Brooding the concept of marketing", *Journal of Marketing*, Vol.33, No.1, 1969.

⁴³ Levitt, Theodore, "Marketing intangible products and product intangibles", *Harvard Business Review*, May-June, 1981, pp. 968-979.

⁴⁴ Juran, J.M., *Juran's quality control handbook*, Frank M. Gryna (ed.) Fourth Edition, McGraw-Hill Book Company, 1988, p.33.5.

⁴⁵ Zeithaml, Valarie A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990, pp. 5-8.

from them. The leaders should always work as part of a team, showing great personal integrity, to achieve their goals.

In the same context, Zeithaml and colleagues stated that service quality marketers face difficulties in marketing services because it is in the nature of a service to be produced and delivered at the same time. Therefore, a service is not countable, measurable, cannot be inventoried or tested, at least not in ways that would make it possible to ensure the quality of the product. Instead, it is delivered on the spot and results in direct contact with the customer; hence quality depends largely on the performance of employees.⁴⁶ Consequently, a service consumer makes decisions from a shortlist of options based on experience, convenience and knowledge. In practice, he takes a high risk, since he can only make a genuine evaluation while consuming the service and after having done so. Word – of mouth marketing is therefore valuable.⁴⁷

Rathmell also noted two types of interface that stem from the production and the consumption of services: one is through implication of marketing mix and the other through buyer-seller interaction.⁴⁸ Since the evaluation of service occurs prior to the purchasing decision, the price and the quality affect the evaluation process.⁴⁹

2.3 Definitions of Quality and Service Quality

Quality is a subjective concept, the simplest definition of which is the discharging of the right tasks in the right way. There are, therefore, two elements in this definition – the performance of the right tasks (which means the

⁴⁶ 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*, Second Edition, The Dryden Press, Florida, 1992, pp. 521-522.

⁴⁷ Lovelocke, Christopher H., "Classifying service strategic marketing insights", John E. G. Bateson (ed.), *Managing service marketing: Text and readings*, Second Edition, The Dryden Press, Florida, 1992, p. 85.

⁴⁸ Palmer, Adrian, *Principles of service marketing*, Dementfort University, McGraw-Hill Book Company Europe, Berkshire, England, 1994, p.171.

⁴⁹ Yilmaz, Hakan, *Identification of critical service intangibles for organizational repurchase decisions*, Available from: www.engineering.uow.edu.au/resources/hakan/gthesis.html, [Accessed on 04 February 2004].

fulfilment of the customer's requests), and the commitment (which means performing the job in the right way the first time).⁵⁰

However, from the customer's point of view, quality is defined as the disparity between a customer's expectation or desire and his perception. Expectation is defined by Parasuraman et al. as the "ideal standard", want or desire, while perception is defined as what a customer gets in reality or his feelings as the service is consumed. Oley defines perceived service as "the degree and direction of discrepancy between perception and expectation". Brown and Swartz define it as a consumer's belief about a service which has been experienced.⁵¹

Gronroos sees that another way of defining quality is as a comparison between a buyer's expectations and a seller's performance.⁵² And Borth proposes that "Quality is the degree of excellence at an acceptable cost.", On the other hand, Juran defines quality as "Fitness for use."⁵³ Other researchers, such as Crosby, define it as "conformance to requirements"; Feigenbaum defines it as "meeting customer's expectations", and he adds, "Quality means the best for certain customer conditions. These conditions are (a) the actual use and (b) the selling price of the product."⁵⁴ Deming, on the other hand, defines quality as "reduction in variation."⁵⁵

Samuel mentions that the International Standards Organization (ISO) has defined quality as "the totality of features and characteristics of products or service that bears on its ability to satisfy the customers' needs".⁵⁶, While

⁵⁰ 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.

⁵¹ Teas, R. Kenneth, "Expectation, performance evaluation, and consumer's perception of quality", *Journal of Marketing*, American Marketing Association, Vol. 57, Issue 4, Oct. 1993, New York, p. 18.

⁵² Eckles, Robert W., *Business marketing management: Marketing of business products and services*, Prentice Hall Inc., New Jersey, 1990, p. 366.

⁵³ Juran, J.M., *Juran's Quality Control Handbook*, Frank M. Gryna (ed.) Fourth Edition, McGraw-Hill Book Company, 1988, p. 33.5.

⁵⁴ Garvin, David A., *Managing quality: The strategic and competitive edge*, The Free Press, New York, 1988, p.40.

⁵⁵ Martin, L. Lawrence, *Total quality management in human service organizations*, Sage Publications Inc., California, 1993, p. 32.

⁵⁶ 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 in the Kuwait

Fortuna has defined quality as conformance to specification and meeting the customer's requirements,⁵⁷ and also as "superiority or excellence", while perceived quality is defined as the "consumer's judgment about a product's overall excellence or superiority".⁵⁸

Juran argues that quality has a special character, which he split into five categories:

1. Psychological – e.g., recognition of regular customers, comfort and beauty of surroundings.
2. Time-oriented – e.g., queuing and repair time.
3. Contractual – e.g., guarantees of satisfaction.
4. Ethical – e.g., honesty, courtesy and truth.
5. Technology – e.g., clarity of service and user-friendly outlets.⁵⁹

In the example of banking, objective quality refers to the physical environment, the control process and the delivery process, while subjective quality refers to service encounters that eventually lead to customer satisfaction.⁶⁰

From the Islamic point of view, some researchers argue that the concept of quality has its roots in Islamic literature and stems from an aspect of Islamic doctrine where quality is synonymous with *Itqan*, which means to arrange and dispose of things in a scientific and artistic way in order to obtain the perfect result or high quality. In addition, in Islamic doctrine, the goal of achieving perfection is sometimes considered to be a form of duty towards society.⁶¹

Finance House", *International Journal of Islamic Financial services*, Vol. 3, No. 4, April-June 2001, Available from: <http://www.islamic-finance.net/journal.html>, [Accessed on 25 May 2004].

⁵⁷ 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, Second Edition, London, 1992, pp. 5-25.

⁵⁸ Zeithaml, Valarie A., *Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence*, 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, pp. 471-499.

⁵⁹ Juran, J.M., *Juran's Quality Control Handbook*, Frank M. Gryna (ed.) Fourth Edition, McGraw-Hill, 1988, p. 33.5.

⁶⁰ Le Blanc, Gaston and Nha Nguyen, "Customer's perceptions of service quality in financial institutions", *International Journal of Bank Marketing*, Vol. 6, Issue 4, 2001, pp. 7-18.

⁶¹ 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 in the Kuwait Finance House", *International Journal of Islamic Financial services*, Vol. 3, No. 4, April-June 2001, Available from: <http://www.islamic-finance.net/journal.html>, [Accessed 25 May 2004].

As to the service quality, Howcroft defines service quality as satisfying the needs and expectations of the customers.⁶² Similarly, Murdick and Smith also describe service quality as meeting the needs and requirements of customers, while Creedon and Lewis describe it as matching, or providing a better service than, the customer's expectations.⁶³

On the other hand, some researchers define service quality as the "measurement of the extent of compatibility between the standard of the service delivered to the customer and the customer's expectations." In contrast, others define it as the function of the customer's expectations, which extends beyond the product to include every aspect of the relationship that grows between the organization and the customer.⁶⁴ It is also defined as the "measurement of the ideal standard of service delivery which meets the customer's expectations".⁶⁵

Lewis and Booms define service quality as "a measure of how well the service level delivered matches customer expectations." From their point of view, the delivering of service quality consistently conforms to the customer's expectation.⁶⁶ Babakus and Mangold, on the other hand, claim that service quality refers to the style of service delivery to the customers.⁶⁷

By introducing perception, Palmer defines service quality as the perceived level of service performance,⁶⁸ while service quality from Goetsch's point of view is "a dynamic state associated with products, services, people, process, and

⁶² 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.

⁶³ 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.

⁶⁴ Elliott, K.M., and Edwards, R.R., "Differentiation based on service quality: A viable small business strategy for minimizing the effects of out shopping", *Annual Conference*, Southwest Small Business Institute Association, Dallas, Texas, 1994.

⁶⁵ Parasuraman, A., et al., *SERVQUAL: A multiple-item scale for measuring customer perception of service quality*, Working Paper, Cambridge, Massachusetts, Marketing Science Institute, 1986.

⁶⁶ 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.

⁶⁷ Babakus, Emin, and W. Glenn Mangold, "Adapting the SERVQUAL scale to hospital service: An empirical investigation", *Health Service Research*, Vol.26, No.6, 1992, pp.767-780.

⁶⁸ Palmer, Adrian, *Principles of service marketing*, Dementfort University, McGraw-Hill Book Company Europe, Berkshire, England, 1994, p.131.

environments that meets or exceeds expectations.”⁶⁹ And from a value-based perspective, Bron defined quality as “the degree of excellence at an acceptable price and the control of variability at an acceptable cost.”⁷⁰

Parasuraman and his colleagues define service quality as “the direction and degree of difference between the customers’ perception of the service and their expectations about it”.⁷¹ In other words, if the perception is better than the expectation, the perception of the level of service quality will be better, and *vice versa*. Therefore, service can be measured and determined through the standard of qualities and characteristics.⁷²

Liljander and Tore have defined perceived service quality as the difference between expectation and the performance of the service, while service quality is defined as the difference between what a service company should offer and what it actually does offer.⁷³

A study carried out by Asubonteng et al. defines service quality as the difference between customers' expectations about the service quality prior to encountering the service, and their perception after receiving the service.⁷⁴

In conclusion, the variety of definitions available reflect the complexity of the concept of quality, as Garvin points out: "Quality is an unusually slippery concept, easy to visualize and yet exasperatingly difficult to define."⁷⁵ Therefore, it has

⁶⁹ 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.

⁷⁰ Rao, Ashok et al., *Total quality management: A cross functional prospective*, John Wiley & Sons Inc., Canada, 1996.

⁷¹ Parasuraman, A., et al., *SERVQUAL: A multiple-item scale for measuring customer perception of service quality*, Working Paper, Cambridge, Massachusetts, Marketing Science Institute, 1986.

⁷² Shields, O. P., *Service quality and academic advising: Practicing what we preach*, Southwestern Marketing Association, Advance In Marketing, 1995; and Biyner, Mary Jo et al., "The service encounter: Diagnosing favorable and unfavourable incidents", John E. G. Bateson (ed.), *Managing service marketing: Text and readings*, Second Edition, The Dryden Press, Florida, 1992, p. 318.

⁷³ 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.

⁷⁴ Asubonteng, Patrick, et al., "SERVQUAL revisited: a critical review of service quality", *The Journal of Service Marketing*, Vol. 10, Issue 6, 1996, pp. 62-81.

⁷⁵ Garvin, David A., *Managing quality: The strategic and competitive edge*, The Free Press, New York, 1988, p. XI.

also been stated that, where quality is concerned, the customer is the driver – the external customer defines the service quality while the internal customer defines the quality of the processes and environment that make the service.⁷⁶

2.4 The Perception of Service Quality

In the absence of the customer's full knowledge of technical quality, which describes the technical characteristics of a service, job quality plays the greater part in forming service quality perception.⁷⁷ And many studies prove that a customer's perception of quality level varies frequently, for many reasons, such as the competition strategies or promotional efforts of other companies; changing consumer tastes; and whether or not a customer has acquired detailed information about products and services.⁷⁸ Table 2.1 shows the Takenchi and Quelch table of quality perception factors.

Table 2.1 Takenchi and Quelch table of quality perception factors

Before Purchasing	At point of Purchasing	After Purchasing
Company's brand	Performance	Ease of Installation and use
Name and Image	Specifications	Handling of repairs claims and warranty.
Previous experiences	Comments of sales people	Spare parts availability
Opinions of friends	Warranty provisions	Service effectiveness
Store reputation	Service and repair policies	Reliability
Published test results	Support programs	Comparative performance
Advertised price for performance	Quoted price for performance	

Source: Juran, J.M., *Juran's quality control handbook*, Frank M. Gryna (ed.), McGraw-Hill Book Company, Fourth Edition, 1988, p. 20.

⁷⁶ 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, pp. 16-20.

⁷⁷ Burch, E., et al., "Exploring Servperf: An empirical investigation of the importance-performance", *Service Quality Relationship in the Uniform Rental Industry*, Southwestern Marketing Association, Advance In Marketing, 1995.

⁷⁸ Zeithaml, Valarie A., *Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence*, 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, pp. 471-499.

2.5 Service Quality Expectation

Liljander and Tore also define expectation as the prediction of future product performance, while past experience and level of satisfaction will affect the customer's predictive expectation.⁷⁹

Parasuraman et al. describe service quality expectation as a desire or want, that they call "Ideal Standard", and Carman defines expectation as "norms" that are built on the customer's past experiences.⁸⁰ Finally, Berry defines customers' expectations as "the comparison standards they use to judge the performance of various service attributes."⁸¹

Because of the competitive advantages of improving the customer's expectation which is an important element in achieving superior quality, researchers have of late increased their interest in the subject. They stress that a company should understand the processes of quality evaluation by customers and then use that understanding to determine the specifications of quality levels necessary to communicate with existing and potential customers.⁸² In this regard, Zeithaml et al. suggest three levels of expectation:⁸³

1. Desired level – what the customer wants.
2. Adequate service – the customer's perception of standard quality.
3. Predicted service level – which occurs upon the customer's demand.

Parasuraman and Berry argue that the customer's expectation is a pillar of the quality process and they state that the "Customer's expectation plays a pivotal role in judging a company's service", the assessment being carried out by comparing the volume of expectation and the perception. They also show that

⁷⁹ 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. 80-81.

⁸⁰ Teas, R. Kenneth, "Expectation, performance evaluation, and consumer's perception of quality", *Journal of Marketing*, American Marketing Association, Vol. 57, Issue 4, Oct. 1993, New York, p.18.

⁸¹ Berry, Leonard, L., *On great services, a framework for action*, The Free Press, New York, 1995, p. 55.

⁸² Ibid, p.131.

⁸³ Ibid., p.175.

a customer's expectation is used as a standard of comparison in two different ways, which reflect his prediction and his desire about the quality level of the service. Thus, the customer's expectation also exists at two different levels – firstly, the desire level, which reflects the expected level of quality of service and, secondly, the adequate level, which reflects the acceptable level of service quality from the customer's point of view.

Interestingly, they define the in-between Tolerance Zone as lying in a range of service performance that is seen as satisfactory, and they state that the customer's loyalty would decrease if the standard of performance fell below the tolerance zone.⁸⁴

Parasuraman and Berry also believe that at least four factors influence the customers' expectations – word-of-mouth communication (WOM); customers' needs; customers' experiences; external communications via printed advertisements, television commercials and brochures – together with, of course, the price.⁸⁵

At the same time, Haller argues that the problem with expectation stems from the variety of different meanings attached to the expression expectation, such as ideal predictive, product type-oriented or minimal expectations.⁸⁶

Nevertheless, face – to face communication in general and word – of mouth communication in particular play a crucial role in forming the expectation of service quality, and they have been found by many studies to be the most effective methods of communication among the many alternatives available to businesses nowadays. Their effectiveness results from the direct exchange of comment and information between two parties who have the ability to ask questions and get answers.⁸⁷

⁸⁴ Parasuraman, A. and Leonard L. Berry, *Marketing services: Competing through quality*, The Free Press, New York, 1991, pp. 57-58.

⁸⁵ Zeithaml, V. A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990, pp. 1-55.

⁸⁶ Haller, Sabine, "Measuring service quality: The results of a longitudinal study in further education", Paul Kunst, and Jos Lemmink (eds.), *Managing service quality*, Paul Chapman Publishing Ltd, London, UK, 1995, pp.13-27.

⁸⁷ McQuarrie, Edward F., *Customer visits: Building a better market focus*, Sage Publications, 1993, p.10.

2.6 Service Quality Models

The concept of service quality has a number of general principles which are then reflected in the service quality dimensions. These principles include:–⁸⁸

1. Cooperation between management, employee and customer demand to achieve customer satisfaction.
2. Confidence – needed to guarantee a concern for customer satisfaction at all stages.
3. Continuity – today's success eases tomorrow's tasks.
4. Quality – the meeting of customer expectations.

Unlike product quality, which Garvin has measured with reference to the number of internal failures (which can be observed before the product leaves the factory) and external failures (which occur during use),⁸⁹ researchers see service quality as having a variety of dimensions. In this regard, Swan and Comb set out two dimensions of service quality – instrumental quality (which describes the physical aspects of the service) and expressive quality (which is related to intangible issues). And Garvin himself sees service quality as having eight dimensions:⁹⁰

1. Performance (operating characteristics).
2. Features (support, maintenance and training).
3. Reliability.
4. Conformance (conformity with management standards).
5. Durability.
6. Serviceability.
7. Aesthetics (a pleasant smile, opportunity to taste samples).
8. Perceived quality (total image of the company from the customer's point of view).

⁸⁸ Choppin, Jon, *Quality through people*, IFS Ltd, Bedford, 1991.

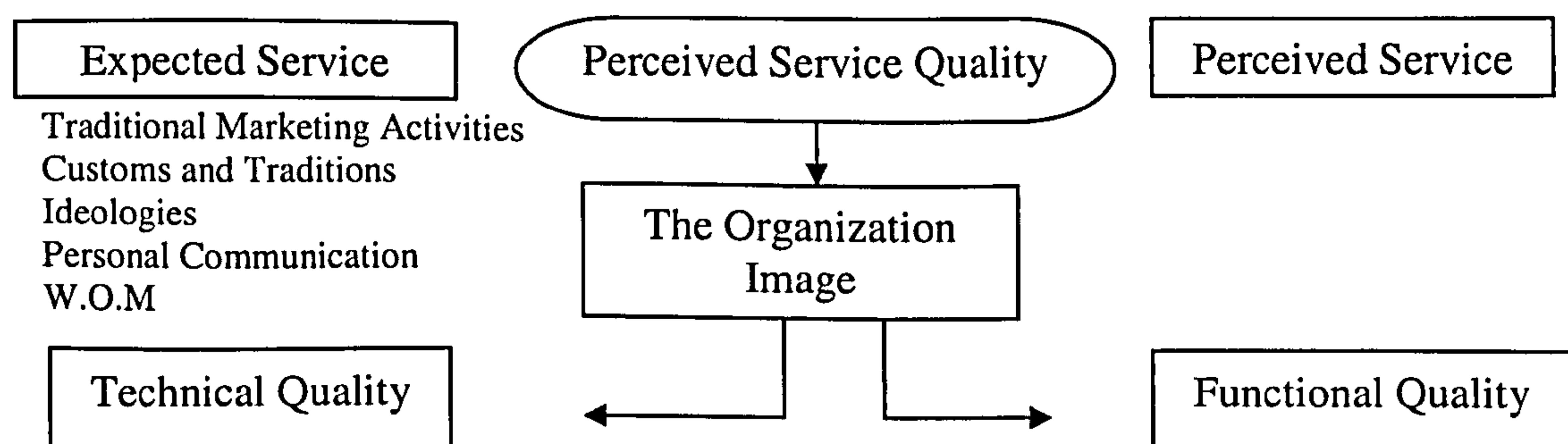
⁸⁹ Garvin, D. A., *Quality on the line*, Harvard Business Review, Sept-Oct, 1983, pp. 65-75.

⁹⁰ Rao, Ashok, et al., *Total quality management: A cross-functional prospective*, John Wiley & Sons Inc., Canada, 1996; and Armisted, G. Colin and Graham Clark, *Customer service and support: Implementing effective strategies*, Pittman Publishing, London, 1992, p.160.

Schonberger adds other dimensions, such as quick response (speed of carrying out tasks) and quick change (flexibility in giving compensation), and humanity (response to customer needs).⁹¹

However, one of the first models of service quality was that developed by Gronroos, in which he distinguished between two types of quality – technical, and functional.⁹² Figure 2.1 shows this model.

Figure 2.1 Gronroos' Model of Service Quality



Source: Dotchin, John A. and Oakland, John S., "Total Quality Management in Services", *International Journal of Quality & Reliability Management*, Vol. 11 No. 3, 1994, pp. 9-42

The Gronroos model suggests two dimensions for service quality: these are the technical quality of products (what the customer receives as a result of dealing with a particular service organization, where job quality refers to the way in which the service is delivered and the interactive process between the service deliverer and the customer); and functional quality, which explains how the customer receives the service.⁹³ In this model, the perceiving process is affected by the other types of quality which all shape the customer's perception of the delivered service; thus the quality of service will be classified as good when the perception exceeds the expectation. Figure 2.2 illustrates these relationships.⁹⁴

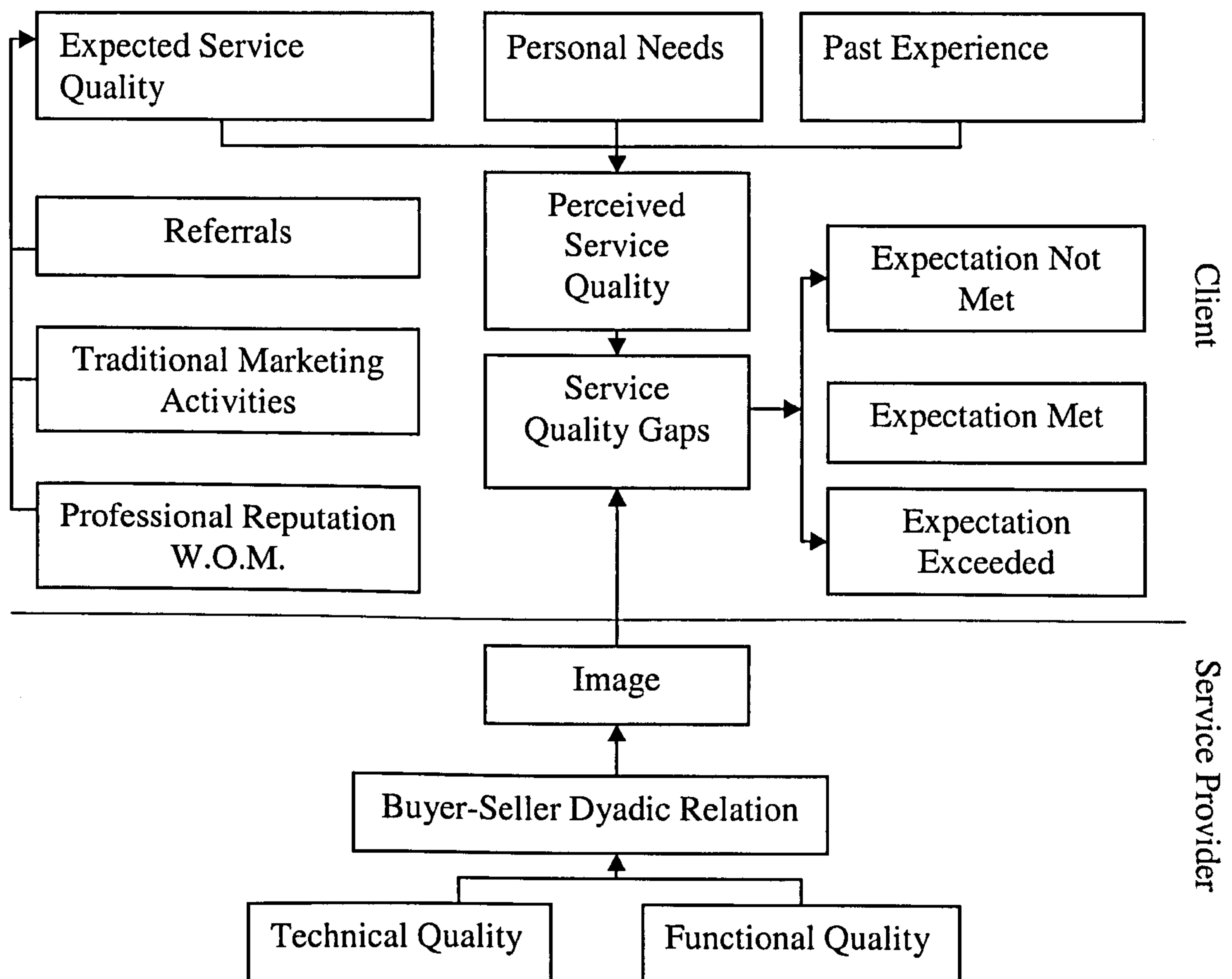
⁹¹ Armisted, G. Colin and Graham Clark, *Customer service and support: Implementing effective strategies*, Pittman Publishing, London, 1992, p. 160.

⁹² Dotchin, John A. and Oakland, John S., "Total quality management in services", *International Journal of Quality & Reliability Management*, Vol. 11 No. 3, 1994, pp 9-42.

⁹³ 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.

⁹⁴ Haller, Sabine, "Measuring service quality: The results of a longitudinal study in further education", Paul Kunst, and Jos Lemmink (eds.), *Managing service quality*, Paul Chapman, London, 1995, pp.13-27.

Figure 2.2 The mechanism of service quality in Gronroos' model



Resource: Eckles, Robert W., *Business marketing management: Marketing of business products and services*, Prentice Hall Inc., New Jersey, 1990, p. 366.

Gronroos also identified five items that play a crucial role in affecting positively the level of service quality:⁹⁵

1. Technical skills.
2. Organization image and reliability.
3. Behaviour and attitude.
4. Accessibility and flexibility of the service facility.
5. Reliability and trustworthiness.

On the other hand, Lehtinen and Lehtinen defined three dimensions:–

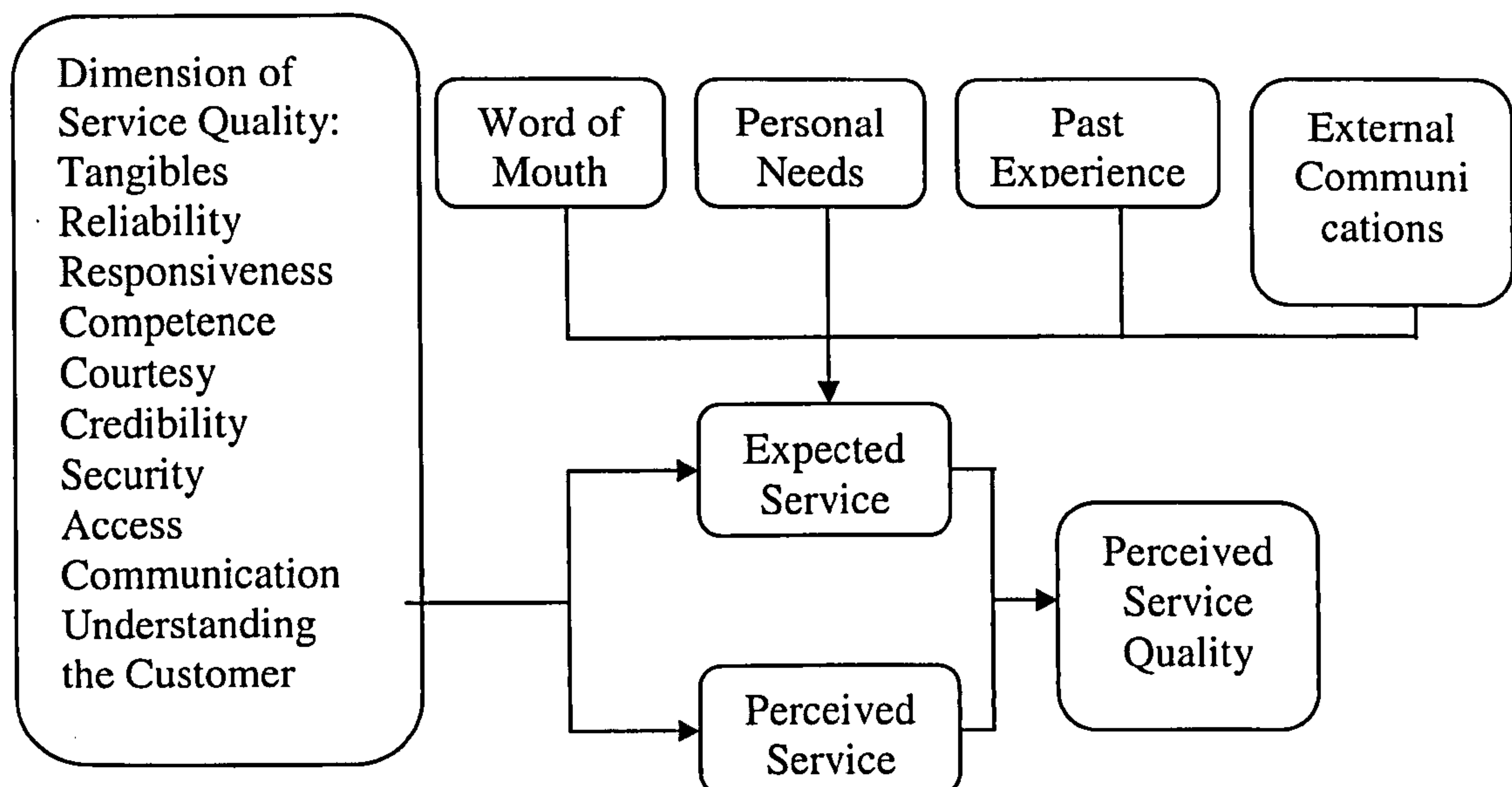
1. Physical quality (the physical element of the service).
2. Corporate quality (image and profile of the service organization).

⁹⁵ 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.

3. Interactive quality (the interaction processes that exist between the service provider and the customer during service provision and between one customer and another after consuming the service).⁹⁶

It should be noted that Parasuraman et al. defined ten dimensions of service quality, saying that in order to evaluate the service quality of any business firm, the customers rely on a set of criteria or dimensions as shown in Figure 2.3. In addition to the four factors that influence or shape the customer's expectations – word-of-mouth communication; personal needs; prior experiences; external communication through media and other marketing tools - they defined ten dimensions. With some exceptions, these dimensions are not independent of each other and an overlap may occur between two or more of them.⁹⁷

Figure 2.3 Service Quality Dimensions



Source: Zeithaml, Valarie A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, New York: Free Press, 1990, p. 23.

The Parasuraman et al. service quality dimensions are subsequently consolidated into five groups:⁹⁸

⁹⁶ Lehtinen, Volevi and Jarmo R. Lehtinen, "Service Quality: A Study of Quality Dimensions", *Unpublished Research Report*, Service Management Group, O.Y., Finland. 1982; and 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.

⁹⁷ Zeithaml, V. A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990, p.23.

⁹⁸ Ibid, p.26.

1. Tangibles – (the appearance of physical facilities, equipment, personnel, and communications materials).
2. Reliability – (ability to perform the promised service dependably and accurately).
3. Responsibility – (willingness to help customers and provide prompt service).
4. Assurance – (knowledge and courtesy of employees and their ability to convey trust and confidence).
5. Empathy – (the caring individualized attention the firm provides its customers).

Furthermore, Stewart and Walsh defined three dimensions to be taken into account when evaluating service quality:⁹⁹

1. Core service (where the service should be designed to service the customer's needs).
2. Physical conditions of the environment (where service is provided).
3. Service relationship (which links the provider with the service receiver).

In the same context, Skelcher described four elements of service quality, each of which consists of a number of dimensions, as follows:¹⁰⁰

1. Service Characteristics – availability of services and products to suit customers' needs; standards of providing services; timelines to suit the customers; reliability of accurate, dependable, and consistent service; equal provision of service to all customers; stability in service performance.
2. Personal relationship – courtesy; politeness; individual responsiveness to customer needs and requirements; competence and skills; knowledge and back-up of staff; communication with customer to provide feedback; security (i.e., the customer deals with the company and uses the service

⁹⁹ Skelcher, Chris, *Managing for service quality*, Longman Industry and Public Service Management, Essex, 1992, p.11.

¹⁰⁰ Ibid, p.13.

without incurring risk); and credibility (i.e., company employees must be trustworthy, believable and honest).

3. The service setting – the appearance of buildings, employees and equipment should be of a good standard; service outlets must be physically accessible; equipment must be reliable and easy to handle.
4. Customer power, which means that customers should be informed of, and know, their rights; they should also have a voice, or the chance to influence service and policy, they should have a choice concerning the standard nature of service, and have the right to complain about faults and obtain redress.

Similarly, Garvin identified eight dimensions – performance, ventures, reliability, conformance, durability, serviceability, aesthetics (how the product looks, feels, sounds, tests and smells), and perceived quality,¹⁰¹ while Eiglier and Langeard defined only two types of service quality dimensions. Finally, Philip cites Sasser as saying that service quality has five different dimensions:

1. Security – confidence and physical safety.
2. Consistency – a permanent and consistent level of service quality.
3. Attitude – the politeness and social manners of the service provider.
4. Completeness – the existence of a full range of service and facilities.
5. Availability – accessibility, location, frequency and training.¹⁰²

While, Naser et al. found that there are three dimensions of service quality:

1. Search quality – colour, style, price, fit, feel and smell. These things are defined prior to purchase.
2. Experience quality – taste, wearability and satisfaction. These are determined after the purchase or during the consumption of the service.
3. Credence quality – which requires an appropriate level of skills to be recognized.¹⁰³

¹⁰¹ Garvin, David A., *Managing quality: The strategic and competitive edge*, The Free Press, New York, 1988, p. 40.

¹⁰² 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.

In sum, to be successful in delivering service quality, a company should understand the way its customers evaluate the service provided and, in particular, recognize the gap between expectation and the perception of the service actually delivered.¹⁰⁴

2.7 The Relationship between Service Quality and Customer Satisfaction

In general, there is little agreement among scholars on the important issue of customer satisfaction. Therefore, the definition, concepts and constructs of customer satisfaction are here defined according to the experience of the researcher.

Thus, customer satisfaction is defined first as a function in which the customer accesses the service quality, product quality and price. Some researchers add the post-purchase benefits, such as qualities, benefits, costs and efforts related to the purchase. Others define customer satisfaction as product performance versus customer expectations, while some see it as an emotional reaction on the part of the customer after accessing the products or the service. Furthermore, customer satisfaction is defined as being equal to or exceeding the customer's perceptions, or as an integrated function consisting of four elements:

1. The essential character of the products or services.
2. The support service.
3. The recovery process of bad experiences.

The word "customization" means meeting customer preferences such as values and needs, and therefore the customer's satisfaction, as per Gerson, is "simply whatever the customer says it is",¹⁰⁵ or according to Fornell et al., "customer satisfaction is when your customer comes back and your products don't."¹⁰⁶

¹⁰³ Naser, Kamal, et al., "Islamic banking: a study of customer satisfaction and preferences in Jordan", *International Journal of Bank Marketing*, Vol. 17, Issue 3, 1999, pp. 135-150.

¹⁰⁴ Skelcher, Chris, *Managing for service quality*, Longman Industry and Public Service Management, Essex, 1992, p.11.

¹⁰⁵ Stewart, Scott Ian, "Customer satisfaction in the metropolitan ambulance service", *Unpublished thesis*, Victoria Graduate School of Business, Faculty of Business and Law, August 2001.

¹⁰⁶ Ibid.

Giorgio Meril defines customer satisfaction as “the only relevant objective for ensuring stable and continuously increasing business.”¹⁰⁷ It is also defined by Oliver as “an evaluation, affective, or emotional response”¹⁰⁸, and by Cronin as “transaction-specific”.¹⁰⁹ Cronin and Taylor go on to explain the difference between service quality and customer satisfaction by saying that the former is about long-term attributes while the latter is a transitory judgment of service quality.¹¹⁰

Customer satisfaction is a summary cognitive and affective reaction to the service relation, while satisfaction or dissatisfaction results from the evaluation process that the customer undertakes on encountering the quality of a service, when he in fact compares the level of quality he encounters with his previous expectation.¹¹¹ In general, there are at least four theories that explain the behaviour of customer satisfaction:¹¹²

1. Equity theory – customer satisfaction happens when the output is equal to inputs such as cost, time and effort.
2. Attribution theory – satisfaction is formed by a combination of external and internal factors, such as the ability to buy, people's efforts, luck and the accessibility of the buying process.
3. Performance theory – satisfaction is achieved when the quality of the product equals its value or price.
4. Expectancy Disconfirmation – the expectation, which is formed prior to the purchase, is compared with the actual result.

¹⁰⁷ 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. 14.

¹⁰⁸ Lee, Haksik, et al., “The determinants of perceived service quality and its relationship with satisfaction”, *Journal of Service Marketing*, Vol.14, Issue 2/3, 2000.

¹⁰⁹ 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.

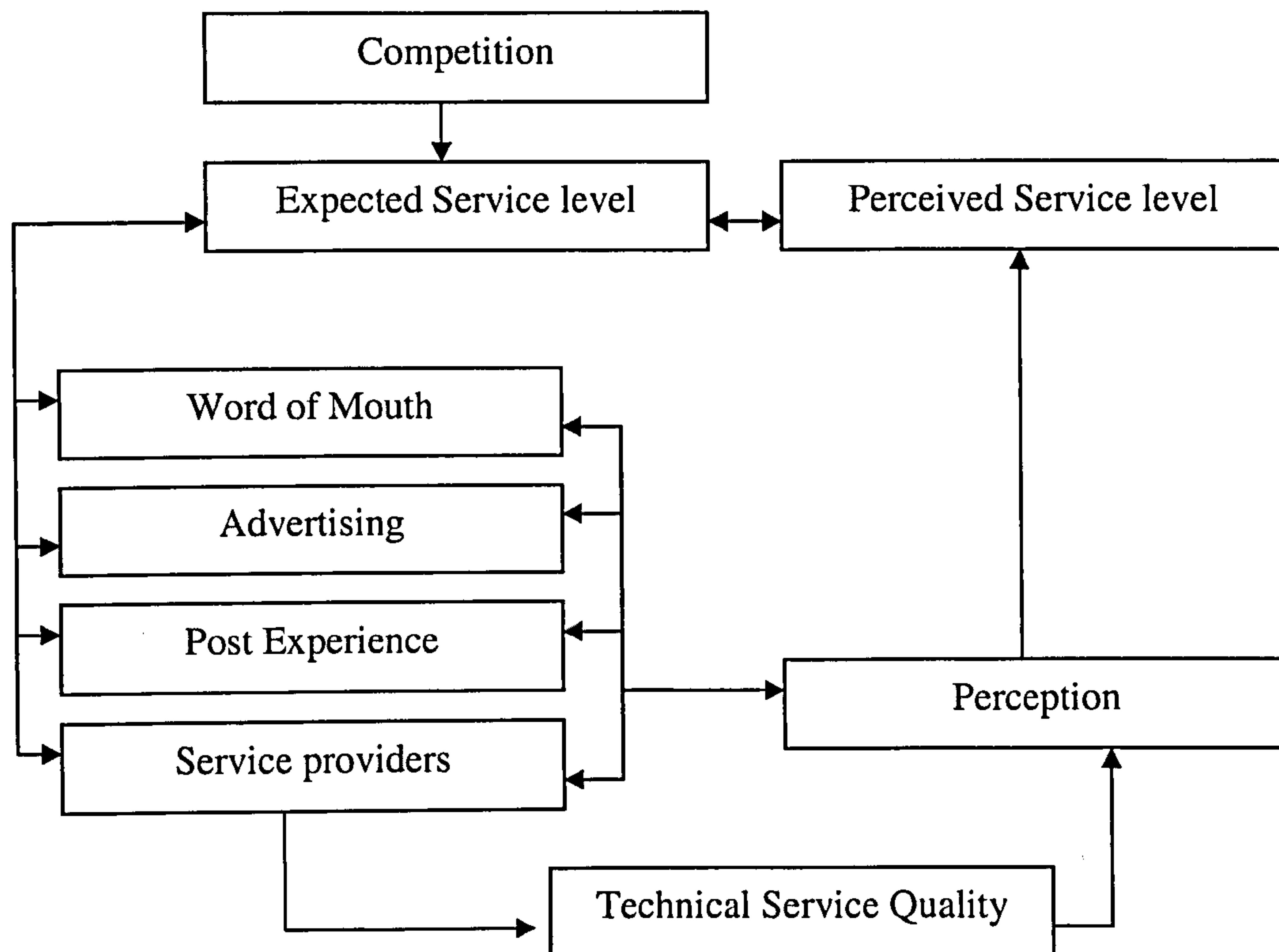
¹¹⁰ Cronin, J. Joseph and Steven A. Taylor, “SERPERF versus SERVQUAL: Reconciling performance-based and perceptions- minus expectations measurement of service quality”, *Journal of Marketing*, Vol. 58, January 1994, pp. 125-131.

¹¹¹ 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, USA, 1994, pp. 1-19.

¹¹² Stewart, Scott Ian, “Customer satisfaction in the metropolitan ambulance service”, *Unpublished thesis*, Victoria Graduate School of Business, Faculty of Business and Law, August 2001.

Parasuraman et al. stated that dissatisfaction results from the gap between the expected and the perceived quality of the service,¹¹³ whereas Bitner, Balten and Draw stated that customer satisfaction is an antecedent of service quality. Fortuna also added that the perceived total service value is the ultimate factor in determining the customers' level of satisfaction.¹¹⁴ Figure 2.4 illustrates such a relationship.¹¹⁵

Figure 2.4 A model of Consumer Satisfaction



Source: Lovelocke, Christopher H., "Classifying service strategic marketing insights", John E. G. Bateson (ed.), *Managing service marketing text and readings*, Second Edition, The Dryden Press, Florida, 1992, p. 87.

Interestingly, virtually the same factors have been used to monitor customer satisfaction in American companies. For instance, the American Customer Satisfaction Index (ACSI) uses the correlations between several factors, such

¹¹³ Stewart, Scott Ian, "Customer satisfaction in the metropolitan ambulance service", *Unpublished thesis*, Victoria Graduate School of Business, Faculty of Business and Law, August 2001.

¹¹⁴ 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.

¹¹⁵ 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.

as perceived quality, perceived value, price tolerance, willingness to repurchase and word –of mouth marketing.¹¹⁶

Another professional study undertaken by American consultants Bain & Company supports the relationship between customer satisfaction and profitability and customer retention.¹¹⁷ Some researchers, such as Cronin and Taylor, even consider consumer satisfaction to be more important than quality in influencing purchasing intention.¹¹⁸ It appears that a satisfied customer is an invaluable asset in terms of repurchase and word-of-mouth marketing, which will ultimately increase profit, while a dissatisfied customer will lead to poor marketing and a high turnover ratio, eventually even causing the company to withdraw from the market.

2.8 The role of employees in Successful Service Quality

The maintenance of quality is a core function of management in any organization. It stands alongside the other eight core functions – customer satisfaction, organization image building, recruitment and retaining of employees, cost-effective delivering of service, market share, employee satisfaction, financial performance and revenue growth.¹¹⁹

Quality is always a primary target, even when it is only the customer who determines what quality is. It can be achieved through understanding and reducing the variations in customer satisfaction and by promoting a corporation culture which includes a long-term perspective, teamwork, top management commitment and employee empowerment.¹²⁰

In this regard, Parasuraman et al. also state that the customer does, in fact, affect the process of providing service. Thus, the controlling power of a service

¹¹⁶ Cronin, J. Joseph and Steven A. Taylor, "Measuring service quality: A reexamination and extension", *Journal of Service Marketing*, Vol. 56, No.3, 1992.

¹¹⁷ Armisted, G. Colin and Graham Clark, *Customer Service and Support: Implementing Effective Strategies*, Pittman, London, 1992, p. 245.

¹¹⁸ Palmer, Adrian, *Principles of Service Marketing*, Dementfort University, McGraw-Hill Book Company Europe, Berkshire, England, 1994, p.171.

¹¹⁹ Robert, Molly Inhofe and Brent M. Wren, "Service Quality as a competitive opportunity", *The Journal of Services Marketing*, Vol. 12, No. 3, 1998, pp. 223-235.

¹²⁰ Martin, L. Lawrance, *Total Quality management in Human Service Organizations*, Sage Publications Inc., California, 1993, p. 24.

provider becomes weak in situations such as doctor's appointments and haircuts. On the other hand, organizations face difficulties in deciding the process of evaluation to be carried out by the customer because there is an absence of predefined clues as to how customers perceive quality of service.¹²¹

Deming also argues that service quality improvement requires a system either to improve the overall functions for all customers or to improve the mean level of service quality by identifying and eliminating the causes of variation in service quality.¹²²

In the same context, Deming has developed a cyclical model of quality which consists of five imperatives:¹²³

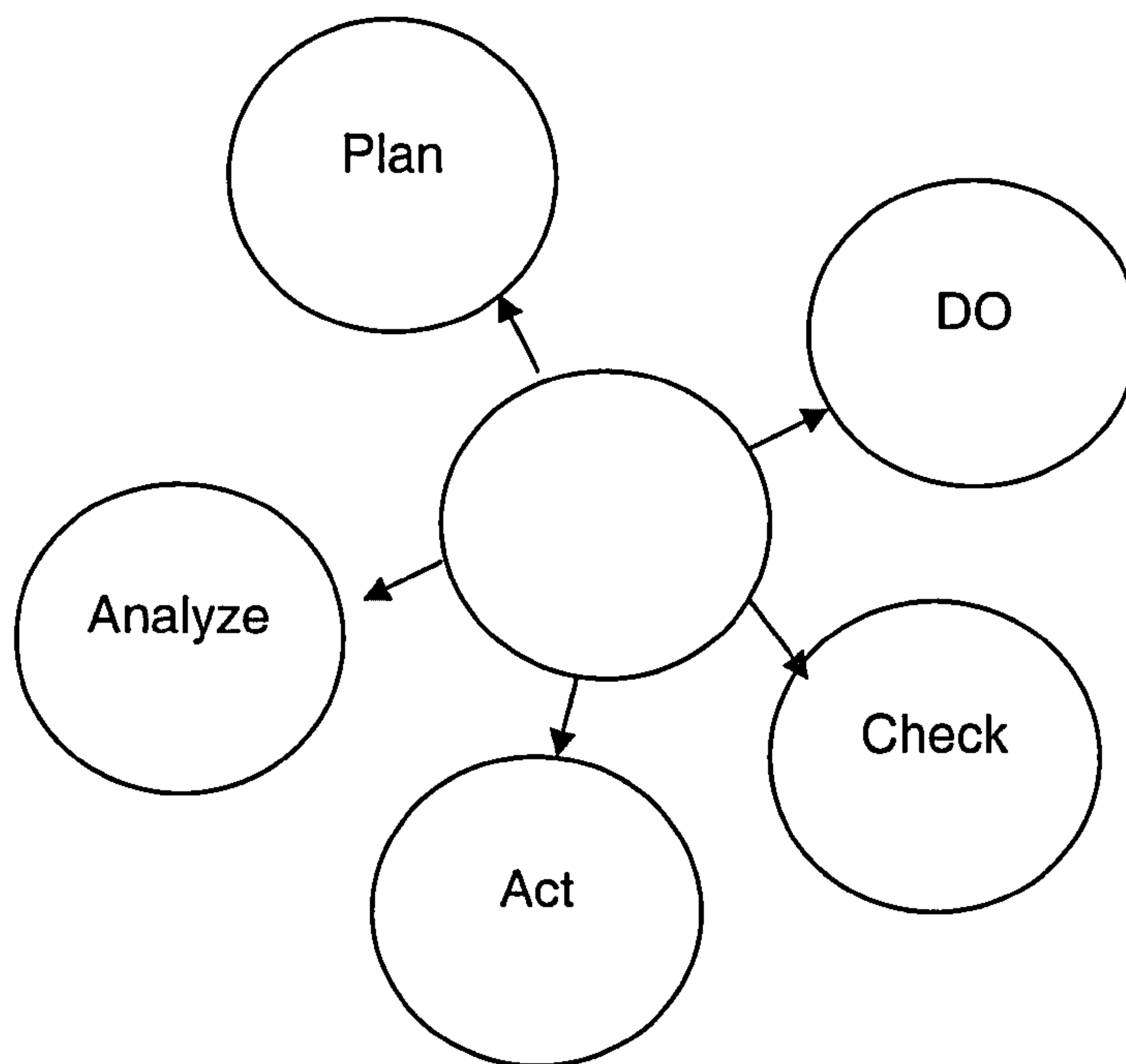
- 1- Plan – make a plan based on research results.
- 2- Do – start production.
- 3- Check – measure output specifications.
- 4- Act – set up the marketing campaign.
- 5- Analyse – get feedback from customers about quality and cost.

¹²¹ 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*, Prentice Hall, Eighth Edition, New Jersey, 1995, pp. 403-405.

¹²² 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.

¹²³ Goetsch, David L. and Stanley B. Davis, *Introduction to total quality: quality management for production, processing, and services*, Prentice-Hall Inc., Second Edition, 1997, p. 16-20.

Figure 2.5 The Quality Cycle



Source: 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, pp. 6-20.

These dimensions are expressed in the quality cycles developed by Albercht and Zemke, shown in Figure 2.5,¹²⁴ where 'strategy' means the direction of power and 'tactics' means the immediate application of power. The quality cycles illustrate the strategies that are responsible for supporting, measuring, and improving the quality of the service provided to the customer. Nevertheless, the system should be periodically reviewed to ensure the maximum positive impact on customer satisfaction.

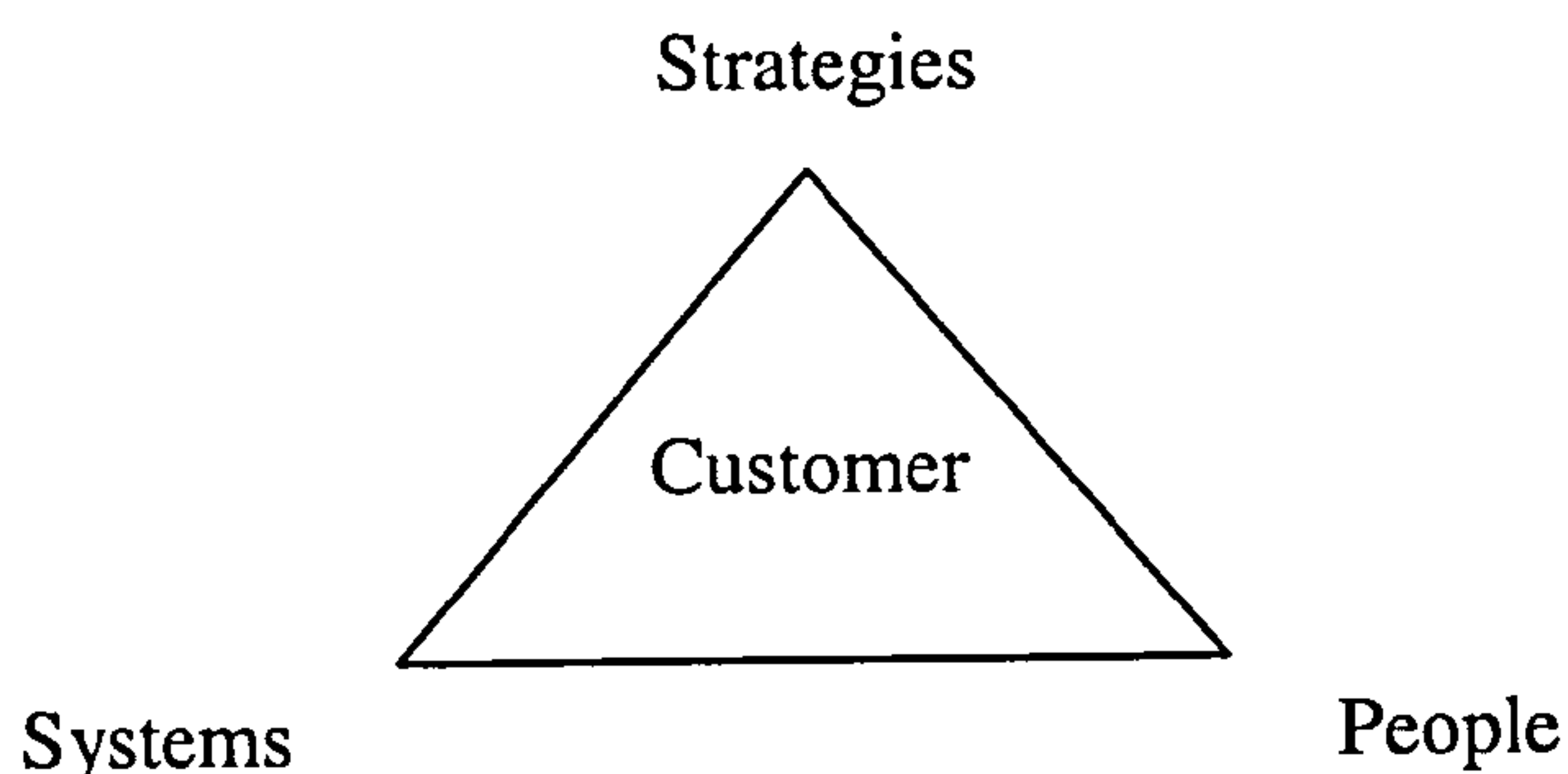
The customer service triangle shown in Figure 2.6 illustrates that strategies, systems and employees are very important in the system; therefore the mission and functions of employees should be clear. To ensure their commitment, employees should participate in devising both the plan and the strategies. Involving and empowering employees is essential to improving quality and to creating a motivational environment to get them involved in planning the standards of service they wish to dispense, and in the process of problem solving. At the same time, organization morale is improved; employee turnover

¹²⁴ Armisted, G. Colin and Graham Clark, *Customer service and support: Implementing effective strategies*, Pittman Publishing London, 1992, p.12.

and absenteeism is reduced, productivity is increased, and the overall culture of the organization is enhanced.¹²⁵

As has been seen, human interaction and efforts play a crucial role in forming the customer's perception of service quality. It is not therefore surprising that Davidson goes so far as to suggest that the service department, because it provides support to the service-providing person, should be at the top of the organization chart and the other departments at the bottom.¹²⁶

Figure 2.6 Customer Service Triangle



Source: Armisted, G. Colin and Graham Clark, *Customer service and support: Implementing effective strategies*, Pittman Publishing, London, 1992, p. 12.

From a practical point of view, a 1985 survey conducted by Gallup in the US looked at the banking, insurance, government, hospital, airline and auto repairs industries. The result indicated that 67 per cent of middle managers agreed that employee attitude, behaviour or competence are the main factors contributing to quality of service, and that the same factors are the cause of 80 per cent of poor service quality.

Interestingly, the Gallup poll highlighted the major factors that contribute to quality of service. In the area of behaviour, acting promptly, listening carefully, giving clear explanations and competence were highlighted. In the area of the personality of employees', good attitude, courtesy, friendliness, kindness,

¹²⁵ Armisted, G. Colin and Graham Clark, *Customer service and support: Implementing effective strategies*, Pittman Publishing, London, 1992, pp. 16-20; and p. 157.

¹²⁶ 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.

alertness, concern, responsibility, a clean and tidy environment and looking and dressing appropriately were seen to be most important.¹²⁷

In addition, studies indicate that 80 per cent of the responsibility for poor quality lies with the management for not having proper recruitment procedures or training programmes, and not giving support to front line workers. Only 20 per cent of the responsibility lies with the front line workers themselves.¹²⁸

Researchers believe that an awareness of the need for service quality must become a strategic concept for management. The lack of such an awareness results in the payment of a heavy price, as illustrated by the example of the dissatisfied customer who quickly becomes the customer of a competing organization. In addition, such a customer creates, through personal contact, a negative image for the establishment in question and for its services. Furthermore, the rate of desertion by customers is an important indicator of service quality in the organization – if the rate is high, the service quality must be poor, while the opposite is also true.¹²⁹ The potential benefits of improving a reliable service that is based on empowered employees and customer care are illustrated in Figure 2.7.¹³⁰

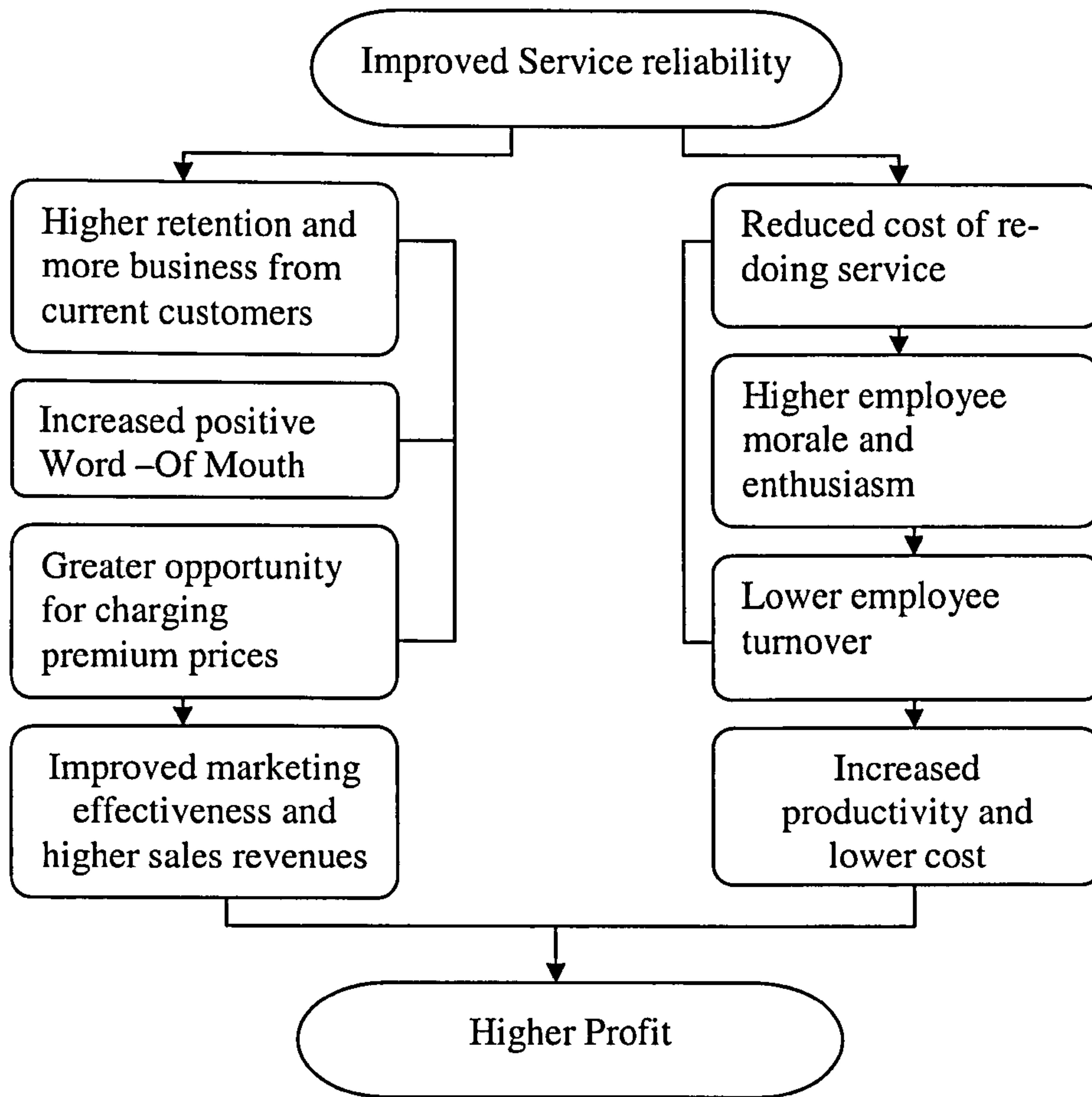
¹²⁷ Wille, Edgar, *Quality: Achieving excellence*, Century Business, London, 1993, pp. 103-105.

¹²⁸ *Ibid.*, p. 98.

¹²⁹ Rouhani, Fariba, "Perceived quality of small to medium professional marketing consultancy service in Australia and Singapore", *Small Business Unit*, Curtin University of Technology Press, No. 9707, 1997.

¹³⁰ Parasuraman, A. and Leonard L. Berry, *Marketing services: Competing through quality*, The Free Press, New York, 1991, pp 16-19.

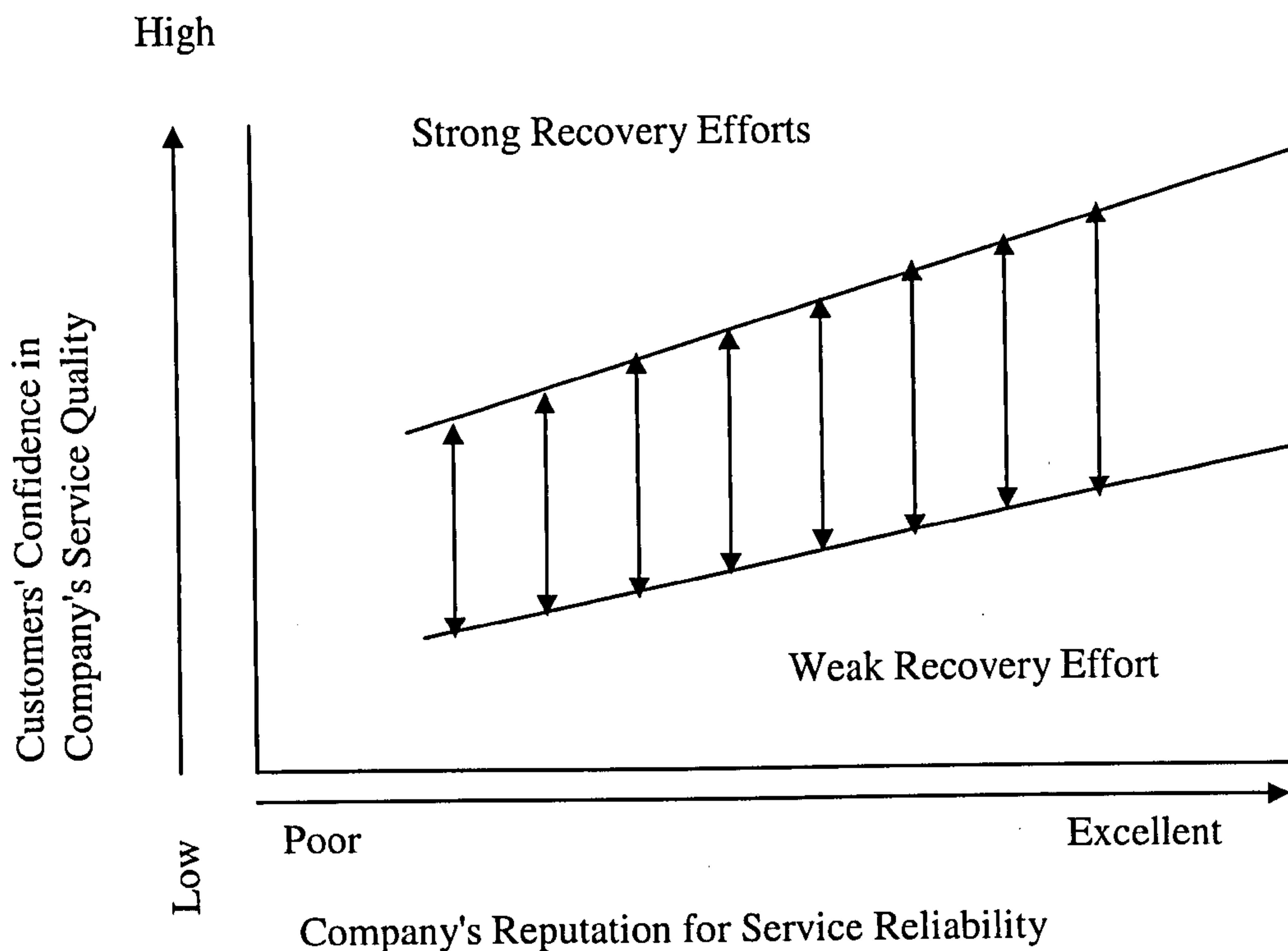
Figure 2.7 Improving service reliability model



Source: Parasuraman, A. and Leonard L. Berry, *Marketing services: Competing through quality*, The Free Press, New York, 1991, p. 18.

On the other hand, bad service results in high operational and administrative costs, while the loss of customer confidence in the company's service quality is a catastrophe in which efforts to recoup the situation will, at the very least, give rise to additional costs. This situation is illustrated in Figure 2.8.

Figure 2.8 Service Quality Recovery



Source: Parasuraman, A. and Leonard L. Berry, *Marketing services: Competing through quality*, The Free Press, New York, 1991, p.41.

2.9 Reasons for the increased attention being paid to service quality

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.¹³¹

The underlying reason for this increase is that the service sector has become a major employer, adding greatly to the economy.¹³² 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.

¹³¹ 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.

¹³² 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.

Apart from the increased value of services in the economy as a whole and the rise in service employment, there are other factors which have contributed to the increased awareness on the part of academics and organizations of the importance of service quality. These factors are:¹³³

1. The growing role of the services sector in economic development and the change from industrial to service societies.
2. The special characteristics that distinguish services from commodities, which make the administration of quality a more complicated process.
3. The increasing importance of a quality strategy in the face of a competitive market distinguished by high levels of organization and efficiency.
4. The increasing role of quality in realizing customer satisfaction and loyalty; and the emergence of the term "service competition".
5. The recognition that service is a most important element in achieving a competitive edge.

Business firms can therefore derive numerous advantages from excellent quality.¹³⁴ 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.¹³⁵

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

¹³³ Al Sahan, Mohammed Farid, "The perceived quality of banking service: An empirical study to test the quality determinants in the quality model", *The Journal of Commerce Faculty for Scientific Researches*, Alexandria University, Vol. 31, Issue No. 2, September, 1994.

¹³⁴ Armisted, G. Colin and Graham Clark, *Customer service and support: Implementing effective strategies*, Pittman Publishing, London, 1992, p.156.

¹³⁵ 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.

businesses, resulting in increased operational profit and decreased operational cost.¹³⁶

Furthermore, other studies have shown that retaining 5 per cent of customers results in a 100 per cent increase in company profit. The increase comes from the length of the relationship with the customer, whose purchasing habits arise out of loyalty. Even when the price goes up, the loyalty shown by these customers results in operational costs declining. It has been proved that a company gains from customer loyalty because it does not need to spend so much time on delivering a service, nor on advertising, and good word-of-mouth referrals from loyal customers always benefit a company immensely. Field studies report that 60 per cent of sales come from referrals, and the company with loyal, long-term customers outperforms its market competitors and even those who have lower unit costs and higher market shares.¹³⁷

Service quality, as Zeithaml et al. define it, is the most important issue, because of its relation to the profitability of the organization.¹³⁸ Service quality can also be regarded as a strategic variable in realizing the efficiency and effectiveness of an organization's operations. High service quality delivery has become one of the priorities of organizations because of its ability to attract new customers and extend business with existing customers. Also, the service quality programme affects profitability in two areas – cost and customer relations.

Interestingly, the field studies showed that the cost of attracting new customers is considerably higher than the cost of retaining an existing one, and also revealed, that a 5 per cent increase in customer retention boosts profitability in the range of 25 to 125 per cent. The boost comes from the reduction in operations costs, price premiums, and additional purchases, combined with the

¹³⁶ 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.

¹³⁷ Reichheld, Fredrick F. and W. Earl Sasser Jr., "Zero defections: Quality comes to services", John E. G. Bateson (ed.), *Managing service marketing: Text and readings*, The Dryden Press, Second Edition, Florida, 1992, pp.550-557.

¹³⁸ Robert, Molly Inhofe and Brent M. Wren, "Service Quality as a competitive opportunity", *The Journal of Services Marketing*, Vol. 12, No. 3, 1998, pp. 223-235.

additional income arising from word-of-mouth recommendations and extra service sales to the existing customer willing to buy more.¹³⁹

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.

Indeed, a customer may be persuaded by good service even if, in reality, he is purchasing a tangible good.¹⁴⁰ Conversely, a customer may be deterred by bad service.¹⁴¹ Grubbs and Reidenbach found that 25 to 40 per cent of unhappy customers closed their account or switched to another company.¹⁴²

All the above-mentioned factors taken together have led to the development of the customer-oriented businesses which are now leading the market in today's highly competitive conditions. Their success may be attributed to:¹⁴³

1. Having a bias towards problem solving, and acting effectively and quickly.
2. Being very close to their customers; listening and learning from customer feedback to improve service quality.
3. Having employee autonomy and entrepreneurship, which give employees the authority to make decisions.

¹³⁹ Robert, Molly Inhofe and Brent M. Wren, "Service Quality as a competitive opportunity", *The Journal of Services Marketing*, Vol. 12, No. 3, 1998, pp. 223-235., pp.152-178.

¹⁴⁰ Dotchin, John A. and Oakland, John S., "Total quality management in services", *International Journal of Quality & Reliability Management*, Vol. 11, No. 3, 1994, pp. 9-26.

¹⁴¹ 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*, Prentice Hall, Eighth Edition, New Jersey, 1995, pp. 403-404.

¹⁴² Al Sayyed, Ismaeel, "Banking service segmentation by using service quality dimensions as one of the retail banking utility bases", *The Journal of Commerce Faculty for Scientific Researches*, Alexandria University, Vol. 34, Issue No. 1, Second Supplement, March, 1997; and 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.

¹⁴³ Skelcher, Chris, *Managing for service quality*, Longman Industry and Public Service Management, Essex, 1992, pp. 2-3.

4. Having people-oriented productivity, in which a company devotes an adequate portion of its investment towards developing employee commitment to enhancing quality.
5. Encouraging top management to set an example in hands-on and value driven work.
6. Always concentrating on their core business and doing what they know best.

Those customer-oriented businesses are often banks which, in particular, rely on the service quality approach to identify customer segmentation, the need for new banking services, the need to develop existing products and the setting of the marketing mix. Banks are keenly aware that both globalization and the rise in importance of customer-oriented service make it imperative that attention be paid to service quality, customer satisfaction and customer loyalty.

In sum, a combination of economic change, globalization and an increased emphasis on customer-orientated service is pushing service to the fore, and it is not surprising that the unique characteristics of service – for example, intangibility, impermanence, simultaneity and diversity – are causing researchers to devote attention to the details of the subject.¹⁴⁴

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.¹⁴⁵ 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 that a satisfied customer tells only a few people, while the dissatisfied one will, on average, tell 19 others.¹⁴⁶

¹⁴⁴ Dotchin, 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.

¹⁴⁵ Zeithaml, V. A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990, p. 2.

¹⁴⁶ 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.

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.

Moreover, it is argued that the delivery of high quality to customers not only leads to a reduction in the rate of customer loss and more protection against price competition, but also decreases the rate of error requiring an organization to repeat the provision of a service. In sum, quality is one of the most powerful drivers of shopping behaviour and product choice, along with price and value.¹⁴⁷

2.10 Conclusion

The use of the quality of banking services as a basis for drawing distinctions might offer researchers an opportunity to study the possibilities of dividing the market into sectors based on the degree of the consumer's awareness of the dimensions of service quality, that is, the operations or processes and the output.¹⁴⁸

On the whole, the existing literature reveals that a good quality of service enables a company to lead the market and neutralize the competition. Therefore, since Islamic banks face tough competition in the market, both from the conventional banks and from other Islamic banks, they should pay proper attention to developing service quality programmes, so as to be able to compete successfully and retain their customers.

The next chapter focuses on a discussion of the SERVQUAL model.

¹⁴⁷ Zeithaml, Valarie A., "Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence", Ben M. Enis, Keith K. Cox and Michael P. Mokwa (eds.), *Marketing classic: A selection of influential articles*, Prentice Hall, Eighth Edition, New Jersey, 1995, pp. 471-499.

¹⁴⁸ Al Sayyed, Ismaeel, "Banking service segmentation by using service quality dimensions as one of the retail banking utility bases", *The Journal of Commerce Faculty for Scientific Researches*, Alexandria University, Vol. 34, Issue No. 1 Second Supplement, March, 1997.

Chapter Three

Measuring Service Quality

3.1 Introduction

In view of the fact that the banking business is a customer-oriented business, service quality must be seen as one of the most important aspects of that business, since any sensible customer, when selecting, or choosing to remain with a bank, will take into account the quality of service he will receive, or which he already receives, for his money.

Also, it was pointed out in chapter one that there is a strong relationship between service quality and the financial indicators of an organization, such as profitability, business growth, market share and neutralization of the competition; it is therefore important for a bank to develop a reliable and viable measuring model in order to track and monitor the level of service quality that will satisfy its customers.

The present chapter presents a review of the universal model of service quality measurement that is widely accepted and used by both academic and business researchers; development studies on the same model will also be highlighted. The chapter is divided into nine sections. First, section one will give a brief description of the gaps analysis model as a whole; section two will discuss service quality dimensions, while the third section will shed some light on the definition of service quality gaps. The antecedents of these gaps are discussed in the fourth section. The fifth section contains a discussion of development studies of SERVQUAL, while section six will outline the criticism that has been directed at the SERVQUAL model. In section seven, we will explain the value and the implications of the SERVQUAL model. Section eight will discuss the findings of a number of studies concerning the implications of SERVQUAL in conventional banks, while section nine will review the findings of service quality studies that focus on Islamic banks.

3.2 Gaps Analysis 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.¹⁴⁹ 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.¹⁵⁰

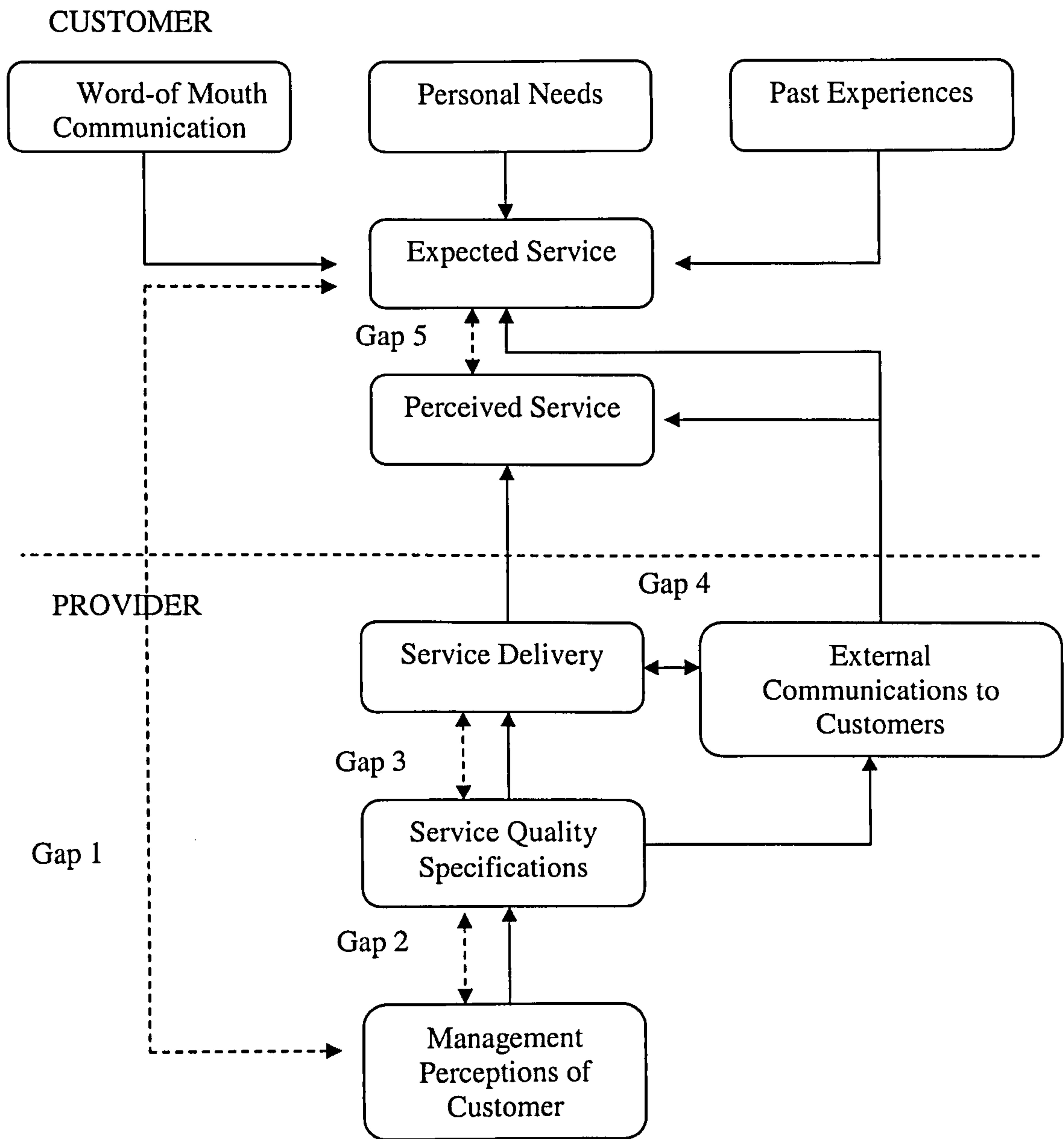
Furthermore, Parasuraman et al. see the service quality measurement model they developed as one of the models that have been shown to enjoy a high degree of validity and stability.¹⁵¹ This model was the product of several experiments and research studies, involving many organizations and covering a number of different areas, which led the researchers to produce the model shown in Figure 3.1 - the gaps analysis model.

¹⁴⁹ Zeithaml, Valarie A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, New York, Free Press, 1990, p. 46.

¹⁵⁰ Ibid.

¹⁵¹ Ibid.

Figure 3.1 The gaps analysis model



Source: Zeithaml, Valarie A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990, p. 46.

3.3 Service Quality Dimensions

In the initial stage, the studies conducted by Parasuraman and his colleagues led to the identification of ten dimensions that the customer employs when assessing the quality of the service delivered to him. In the light of subsequent

studies, the number of dimensions has here been reduced to five, these being Tangibles, Reliability, Responsiveness, Assurance, and finally Empathy.¹⁵²

The tangibles dimension is related to the various types of material facility, including equipment, appearance of personnel, the customer, logos and the means of contact used by the organization. Reliability is related to the ability to fulfil promises of efficiency in always providing the same level of quality of service, with the possibility of the customer's reliance on such ability, or the ability to perform the service dependably and accurately.

Later, Parasuraman et al. refined this dimension and recommended splitting it into two sub-dimensions, with one related to the physical facilities and equipment of the organization and the other being connected to employees and communications tools.¹⁵³

Responsiveness expresses the desire or willingness of the service provider to help customers and deliver the services to them, and includes promptness, convenience, accessibility and effective communications, while assurance is defined as the knowledge, courtesy and general behaviour of the employees of the service organization, together with their ability to offer assurance and confidentiality to customers by means of their competence, courteousness, privacy, credibility and effective communication.

The fifth dimension is empathy, which refers to the personal care and personal interest offered by the organization to its customers through putting the service deliverer himself in the position of the customer in order to be able to experience the latter's feelings. Empathy includes caring, individualized attention and approachability.¹⁵⁴

The study of Zeithaml et al. indicates that reliability is the most important of the five dimensions, while the dimension of tangibles is the least important.

¹⁵² Zeithaml, Valarie A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990.

¹⁵³ Parasuraman, A., et al., "Refinement and reassessment of the SERVQUAL scale", *Journal of retailing*, Vol. 67, No. 4, Winter 1991; and Grapentine, Terry, "The history and future of service quality assessment", *Marketing research*, Winter '98/Spring '99. Vol. 10, Issue 4, pp. 4-17.

¹⁵⁴ Grapentine, Terry, op. cit., pp. 4-17.

Parasuraman and Berry also drew attention to the relative importance of the SERVQUAL dimensions, and list them as reliability, responsiveness, assurance, empathy, and tangibles, in that order. They added that consistency in the dimension of reliability is the key to engaging in effective competition and in building goodwill and a good reputation.¹⁵⁵

In summary, the importance of the SERVQUAL dimensions has been researched in a number of studies, one of which lists them in order of importance as reliability, responsiveness, assurance, empathy and tangibles.¹⁵⁶

3.4 Service Quality Gaps

Zeithaml and her colleagues identified five gaps that occur as a result of a discrepancy or absence of correspondence between what customers expect and what they actually perceive about the quality of the service delivered by the organization (See Figure 3.2, illustrating the SERVQUAL model).¹⁵⁷

The first of these is the gap between a customer's expectations and the management's perceptions of those expectations, that is, the difference between a customer's expectations of the standard of service and the management's perception of the customer's expectations. This gap occurs as a result of the inability of management to accurately determine the expected needs and interests of customers. The existence of this gap leads the company in question to spend a great deal of money and time on things that the customer might not want.¹⁵⁸

The second gap occurs when the management sets the criteria and standards of service quality, and these do not comply with management's perceptions of the customer's expectations. The reason for the emergence of this gap is the

¹⁵⁵ Zeithaml, Valarie A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990, pp. 55-133

¹⁵⁶ Getz, Donald et al., "Service quality evaluation at events through service mapping", *Journal of Travel Research*, Vol. 39, Issue 4, Boulder, May 2001.

¹⁵⁷ Zeithaml, Valarie A., et al., op. cit., pp. 55-133.

¹⁵⁸ Al Sayyed, Ismaeel, "Banking service segmentation by using service quality dimensions as one of the retail banking utility bases", *The Journal of Commerce Faculty for Scientific Researches*, Alexandria University, Vol. 34, Issue No. 1 Second Supplement, March, 1997.

inability of the organization to adopt the philosophy of quality as a result of restrictions related either to resources or to the organization of the establishment.

The third gap appears when the service delivered to the customer is incompatible with the criteria and standards laid down by management. In other words, the service providers are unable to meet the performance criteria for services as set down by the management.

The fourth gap appears as a result of problems related to the credibility of the service organization. Thus, promises made by the organization regarding the standard of its service through such contact with customers as personal sales and advertising, are not kept when the service is actually delivered. Moreover, the basic determining of the customer's expectations is carried out by the external contacts of the organization. Therefore, promises made by the service organization through the advertising media, sales promotion and other means of contact lead to a rise in expectations. Eventually, these expectations represent the criteria by which the customer assesses the quality of service.¹⁵⁹

Furthermore, according to Zeithaml et al., the fourth gap reflects poor coordination between the employees responsible for delivering the service and management, who are responsible for describing the services to be delivered to customers.¹⁶⁰

Finally, the fifth service quality gap in the SERVQUAL model refers to the degree of difference between the perceptions and the expectations of the customers. Zeithaml and her colleagues defined the fifth service quality gap as the difference between the consumer's expectations and his perceptions, which they call perceived service quality. In addition, they stated that the size of the fifth service quality gap is a product of the four other gaps associated with

¹⁵⁹ Idris, Thabit A., "Measuring service quality by SERVQUAL: An empirical study of health care in the state of Kuwait", *Arab Journal of Administration Science*, Vol. 4, No. 1, 1996.

¹⁶⁰ Zeithaml, Valarie A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990, pp. 55-133.

delivering service quality.¹⁶¹ In other words, the fifth service quality gap is considered to be the net result of the occurrence of the other four gaps and it represents the incompatibility of the perceived services with the expected services, from the customer's point of view. The chief determiners of the service expected by the customer include previous experience, personal needs, word of mouth, and advertising.¹⁶²

In summary, the service quality gaps according to the SERVQUAL model may be defined as follows:¹⁶³

1. Gap one is the difference or the discrepancy between the customer's expectations and management's perceptions of those expectations. Privacy, confidentiality and security, especially in credit card dealing and service recovery, are pivotal attributes in banking and relate to this gap.¹⁶⁴
2. Gap two is the difference or the discrepancy between management's perceptions of customer expectations and service quality specifications.
3. Gap three is the difference between service quality specifications and the service quality actually delivered.
4. Gap four is the difference between service delivery and what is communicated externally about the service to the customer. Studies have proved that advertising and the media in general have an extremely important effect on customer expectations; it is therefore essential that an organization be realistic and not use exaggeration in its advertising campaigns.¹⁶⁵
5. Gap five is the difference between the customer's expectations and his or her perceptions.

¹⁶¹ 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. 524.

¹⁶² Idris, Thabit A., "Measuring service quality by SERVQUAL: An empirical study of health care in the State of Kuwait", *Arab Journal of Administration Science*, Vol. 4, No. 1, 1996.

¹⁶³ Grapentine, Terry, "The history and future of service quality assessment", *Marketing Research*, Winter '98/Spring '99, Vol. 10, Issue 4, pp. 4-17.

¹⁶⁴ 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*, Prentice Hall, Eighth Edition, New Jersey, 1995, p. 407.

¹⁶⁵ Ibid, p. 407.

Parasuraman et al. express the gap model in the form of an equation, as follows:

$$Q=P-E$$

where Q stands for Quality and P and E stand for Perception and Expectation respectively.¹⁶⁶

3.5 The Antecedents of Service Quality Gaps

Zeithaml and her colleagues observed that there are organizational factors that lie behind the occurrence of each of the gaps. They called these factors antecedents.¹⁶⁷

The first gap in service quality has antecedents such as a weak engagement with market research; a weakness in upward contact and a multiplicity of administrative levels within the organization.

More precisely, service quality management elements include: marketing research orientation, which consists of the amount of marketing research carried out, the usage of marketing research and the marketing research focus. If the service organization pays more attention to operational functions or if its management is operation-oriented, the operational element is more important than marketing. It therefore pays less attention to marketing research and is less marketing-oriented, and, in fact, neglects its customer's needs;¹⁶⁸ thus, the quality of marketing research can lessen or widen the gap.¹⁶⁹

The upward communications consist of the extent of direct interaction between managers and customers, the extent of employee-to-manager communication, the extent to which inputs from contact personnel are sought, and the quality of contact between managers and contact personnel. Since the messages that are exchanged between the customer contact personnel and the customer are by

¹⁶⁶ Grapentine, Terry, "The history and future of service quality assessment", *Marketing research*, Winter 98/Spring 99. Vol. 10, Issue 4, pp. 4-17.

¹⁶⁷ Zeithaml, V. A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990, pp. 51-135.

¹⁶⁸ 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.525.

¹⁶⁹ Grapentine, Terry, op. cit., pp. 4-17.

nature difficult and ambiguous, face-to-face communication is the most effective method of communication.¹⁷⁰ In addition, the employee who is in contact with another customer can predict a customer's expectations and perceptions, and management can enhance vertical communication by embracing creative management tools such as walking around and employees' gripe sessions.¹⁷¹

On the other hand, the level of management consists of a number of elements, such as the number of layers that exist between customer contact personnel and top managers. The greater the number of layers between customer contact personnel and top managers, the greater will be the size of the gap.¹⁷²

The second gap antecedents include the following: the commitment of management does not suit the service quality; the practical impression; the stereotyping of tasks; and the setting of goals. The indicators of management commitment to service quality include locating sufficient resources to serve service quality, along with setting service quality programmes, and the commitment of top management. Commitment alone is not enough, however: it must also give rise to a consistent strategy.¹⁷³

Goals-setting includes the use of technology to set standards for equipment (Hard Tech) and software programs (Soft Tech) in order to be able to set up a process of setting targets for service quality and of measuring the achievements. Service quality measurement is made easy by adopting the technological option to set standards for tasks, and is made more feasible in terms of problem recovery and quick response.¹⁷⁴ In this regard, Grapentine has stated that "formal goal setting transforms pious platitudes into concrete actions and objectives."¹⁷⁵

¹⁷⁰ 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.526.

¹⁷¹ Ibid., p.526.

¹⁷² Grapentine, Terry, "The history and future of service quality assessment", *Marketing Research*, Winter '98/Spring '99. Vol. 10, Issue 4, pp. 4-17.

¹⁷³ Zeithaml, Valarie A., et al., op. cit., pp. 527-528.

¹⁷⁴ Ibid., pp. 527-528.

¹⁷⁵ Grapentine, Terry, op. cit., pp. 4-17.

Another antecedent of the second gap is a perception of feasibility, where management believes in its ability to meet customer expectations, and this will work to bridge the gap.¹⁷⁶

The antecedents of the third gap are role ambiguity; role conflict; the unsuitability of a job to an individual; a weakness in supervisory control systems; a lack of perceived control; and a weakness in working as a team.

Gap three occurs when employees are unable or unwilling to perform the service at the desired level. For instance, teamwork elements consist of internal customer service programmes, customer contact personnel feeling that they are under the care of management, internal cooperation between the business units, employees being personally involved and committed to service quality, and management having a programme to motivate them to develop that feeling.

Employee job fitness includes many elements, such as the employee's ability to perform his or her job functions and the fact that the work process must be effective and important, while technology job fitness includes the effectiveness of the equipment and tools that are used to perform the job.

The concept of perceived control consists of the control employees have over their job, the amount of leeway available to the customer contact employee to make an effective decision in the workplace, the needs and demands of both customers and employees being predictable by management, as well as the existence of supervisory control systems in which the evaluation and the appraisal of employees are based on their actual efforts, rather than solely on the quality of output.

Role conflict occurs when the management's policies contrast with the quality specifications, and the factors which affect this antecedent include the amount of paperwork used to complete the service and the number of internal contacts between departments that are required in order to deliver the service. By contrast, role ambiguity simply means that there is not enough information

¹⁷⁶ Zeithaml, V. A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990, pp. 51-135.

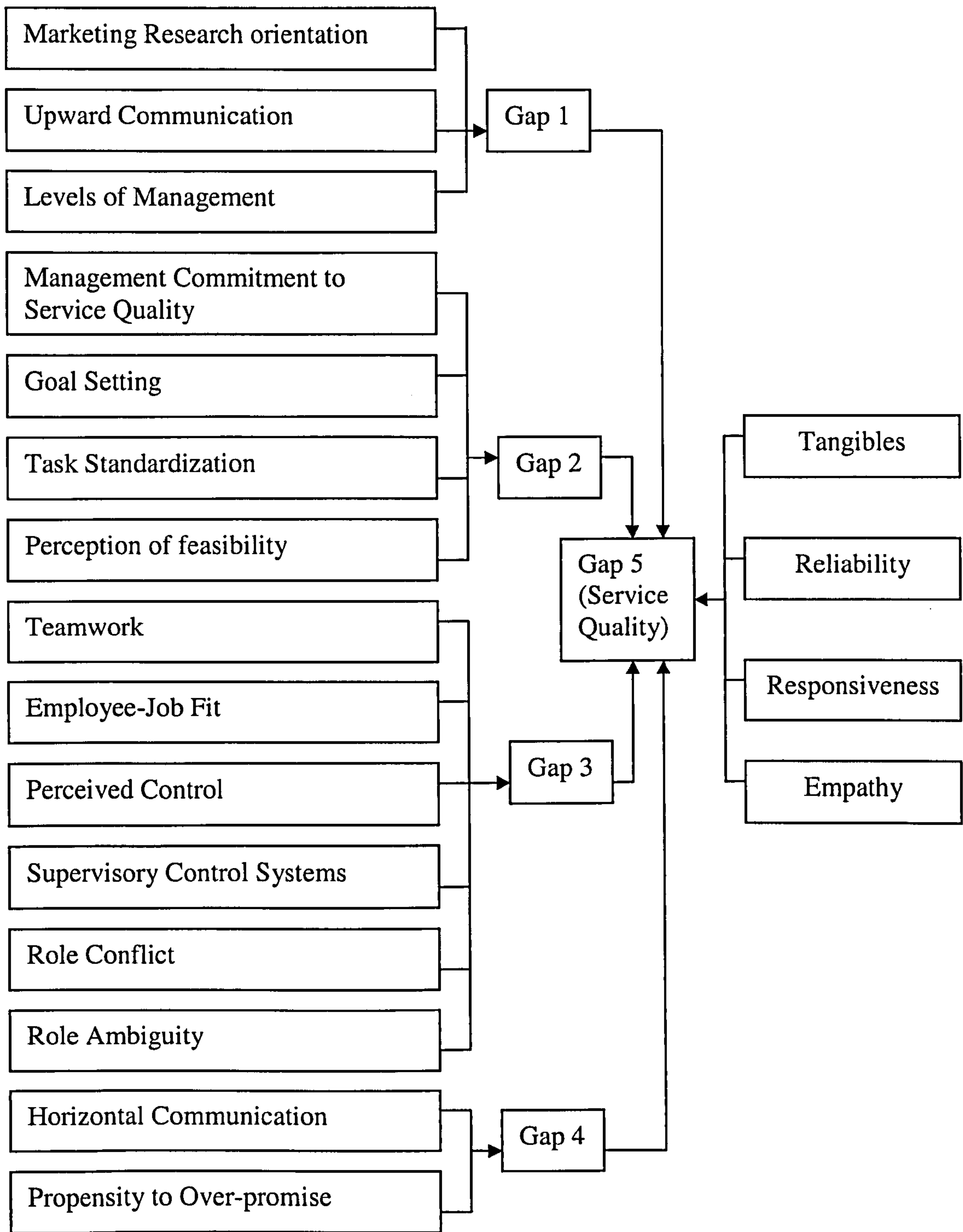
available to deliver the service; also, specifications and goals must be clear to employees, and downward communication should be frequent and of a high standard, while customer contact personnel should receive effective feedback on a regular basis and have training in communication skills in order to perform effectively.¹⁷⁷

Gap four is defined as the difference between service delivery and external communications. The antecedents to this gap thus include a weakness in horizontal contacts between the organization's departments and its branches, and a tendency towards exaggeration in the promises made by the organization. Hence, contact personnel should be fully aware of the promises and the service specifications the company advertises in the media to its customers.¹⁷⁸

¹⁷⁷ 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.532.

¹⁷⁸ *Ibid.*, p.533.

Figure 3.2 SERVQUAL gaps model and their antecedents



Source: Zeithaml, Valarie A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990, p. 131.

3.6 The SERVQUAL Model and Development Studies

Parasuraman and his associates undertook the task of re-designing the SERVQUAL instrument as follows:

1. Improvements were made in the area of measuring expectations. Here, they introduced the term “distinguished organizations” in place of the term “organizations must”, as the use of the latter term led to exaggerating the rate of expectations to 6.22 points on a graded Likert scale, the degrees of which vary between 1 and 7.¹⁷⁹
2. They replaced the negative expressions with more positive ones, as it was found that they were misleading and detrimental to the credibility of the scale.
3. For the purpose of a better representation of the five dimensions of service quality, they replaced one of the expressions measuring tangibles and another of the expressions measuring the assurance dimension.
4. The objectives of using the data obtained by using the model were identified as follows:
 - a. Determining the average gap result between the customers' expectations and their perceptions of the service delivered to them.
 - b. Assessing the service quality in the organization for each of the five service quality dimensions.
 - c. Determining the relative importance of each of the service quality dimensions.
 - d. Undertaking a follow-up assessment of changes in the expectations and perceptions of customers in relation to the quality of service offered by the organization over time.
 - e. Devising a benchmarking process to compare the service quality of the organization with that of the relevant industry in general and with competing organizations in particular.

¹⁷⁹ Zeithaml, V. A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990, pp. 51-135.

- f. Categorizing customers according to their assessment of the service performance of the organization.
- g. Testing the internal service quality of the organization in the various departments' levels of management.

SERVQUAL appears to be considered the most popular measuring tool to date in customer satisfaction studies; some of those studies have revealed that SERVQUAL dimensions such as reliability and empathy have a significance for overall quality.¹⁸⁰

Furthermore, the SERVQUAL technique can be used in order better to understand the consumer's needs and his expectations and perceptions; also, the studies prove that SERVQUAL is useful and applicable in a broad range of industries, after a minor modification to the original SERVQUAL model is made.¹⁸¹

The importance of SERVQUAL in marketing and investment functions has also been proved: for instance, using demographic data in the customer segmentation and retail finance portfolio, SERVQUAL can be used to classify the strengths and weaknesses of service. In addition, from SERVQUAL results, it is possible to develop indices to monitor and compare the development in service quality of the company over a particular period with that of competitors and with that of the industry in general. The result of the SERVQUAL measurement might also be used as a standard, which would make it possible to exceed customer expectations and to consolidate the company's position in the market. Accordingly, SERVQUAL has been applied to many business industries, such as health care, banking, currency exchange, airlines, couriers and catering.¹⁸²

Reidenbach and Beverly used SERVQUAL to measure individual perception of the service quality of hospital operations. They concluded that reliability,

¹⁸⁰ Liljander, Veronica and Tore Standvik, "The relation between service quality, satisfaction and intentions", Paul Kunst and Jose Lemmink (eds.), *Managing service quality*, Paul Chapman Publishing Ltd, London, UK, 1995, pp. 45-61.

¹⁸¹ Palmer, Adrian, *Principles of service marketing*, Dementfort University, McGraw-Hill Book Company Europe, Berkshire, England, 1994, p.180.

¹⁸² *Ibid.*, p.181.

competence and tangibles are the most crucial dimensions in the health care business. They also found that there is a strong correlation between perception of service quality and customer satisfaction and the willingness of customers to recommend the hospital to others.¹⁸³

In addition, Headley and Miller used SERVQUAL to measure the quality of medical care, and the results of their study showed that SERVQUAL is reliable in the health care industry, as there was an obvious relationship between service quality and repeat purchase, complaining behaviour, and complimenting and switching behaviour. They also found that SERVQUAL as a theoretical model provides management with viable tools for microanalysis, pre-encounter and post-encounter service-providing indications. In addition, the most important dimensions were reliability, dependability and empathy respectively.¹⁸⁴

From a practical standpoint, Parasuraman et al. made some efforts to refine SERVQUAL in order to overcome most of the inefficiencies mentioned in various studies. They proved that the SERVQUAL model possessed a high level of validity in measuring service quality in all service industries. In addition, they argued that the order of importance of the dimensions in the SERVQUAL model is as follows: reliability; responsiveness, assurance, empathy and tangibles.

Furthermore, in their study, Parasuraman et al. mentioned that it is necessary to focus on exploring the nature and the causes of interrelationship between the SERVQUAL dimensions. Accordingly, Parasuraman et al. support the expectation and perception model in calculating the service quality gaps. They also stated that the causal model they invented possesses acceptable reliability and provides management with a valuable diagnostic tool.¹⁸⁵

¹⁸³ 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.

¹⁸⁴ 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.

¹⁸⁵ Parasuraman, A., et al., "Refinement and reassessment of the SERVQUAL scale", *Journal of Retailing*, Vol. 67, No. 4, Winter 1991.

Jensen and Markland also tested SERVQUAL, and proved that, despite the criticisms directed at this model, it still possesses many advantages. SERVQUAL, according to the results of their study, provides adequate and well-organized tools for measuring service quality, and it also provides a diagnostic method for the regular tracking of service quality trends. At the same time, SERVQUAL defines the relative importance of service quality dimensions and their influence on customer perceptions, setting customer segmentation and measuring cross-quality levels among the units of the organization. They concluded their study with a strong recommendation that SERVQUAL should be used along with certain statistical methods in order to obtain meaningful information.¹⁸⁶

Nel et al. tested the reliability of SERVQUAL in the service industry in South Africa, and found that the model possesses a high level of reliability and validity in measuring service quality. In addition, the study carried out a cross-cultural comparison of levels of service quality, where differences in nationality affect the formation of perceptions and expectations of service quality.¹⁸⁷

On the other hand, Detchin and Oakland tested SERVQUAL in an attempt to assess the differences in quality between several types of service as well as assessing the importance of the service quality dimensions. It is well known that the importance of the SERVQUAL dimensions varies according to labour, intensity, contact, intervention choice, adaptation, the nature of the service and the direct recipient of the service. The study recommended that service quality be measured on the basis of several heterogeneous dimensions, and that the core business of the service and a wide range of industries should be included in service quality measurement.¹⁸⁸

Mehta and Durvasula proved the importance of service quality in the business-to-business market, and argued that service quality represents organizational efforts, so that any weak area in the organization function chain will affect the

¹⁸⁶ 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.

¹⁸⁷ Nel, Deon, et al., "The SERVQUAL instrument: reliability – validity in South Africa", *South Africa Journal of Business Management*, Vol. 28, Issue 3, September 97.

¹⁸⁸ 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.

level of service quality provided in the service encounter area. Moreover, the study supported the importance of the service quality dimensions and their relation to service quality performance, and the authors also recommended that SERVQUAL be simplified. They demonstrated the relationship between service quality and customer loyalty on the one hand, and the validity of developing a service quality system to provide feedback information about the benchmark performance standard of service quality and developing a quality culture in the organization, on the other hand.¹⁸⁹

Lin et al. attempted to measure the correlation between service provider personality and service performance by using the SERVQUAL model, and concluded that service quality is moderated by gender, since this affected the level of most of the SERVQUAL dimensions: reliability, responsiveness, agreeableness, assurance and empathy.¹⁹⁰

At the same time, Grapentine used the service quality model to prove that there is a significant relationship between superior service and higher performance achievements, such as high share growth, premium prices and high net profit, and stated that the company could thus increase its prices by 8 per cent more than other competitors.¹⁹¹

3.7 Criticisms of SERVQUAL

The service quality measurement model proposed by Parasuraman and his associates has been criticized by some researchers in the field (for example, Babacus and Polar;¹⁹² Cronin and Taylor;¹⁹³ and Spreng and Sing),¹⁹⁴ after

¹⁸⁹ 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.

¹⁹⁰ 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.

¹⁹¹ Grapentine, Terry, "The history and future of service quality assessment", *Marketing Research*, Winter 1998/Spring 1999. Vol. 10, No. 4, pp. 4-17.

¹⁹² Babakus, E., and G. W. Boller, "An empirical assessment of the SERVQUAL scale" *Journal of Business Research*, Vol. 24, 1992, pp. 253-268.

¹⁹³ 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.

¹⁹⁴ Spreng, R. A. and A. K. Sing, "An empirical assessment of the SERVQUAL scale and the relation between service quality and satisfaction", D. W. Cravens and Dickson P. (eds.),

using it in various businesses, such as car recovery, banks, pest control, dry-cleaning, fast food outlets, retailers and hotels. The majority of these scholars do not support the five dimensions model of service quality.¹⁹⁵

Despite this, other studies have found that SERVQUAL provides a well-documented multidimensional approach for measuring service quality; however, their main criticism centres on the dimension construction, since SERVQUAL studies show differences in measurements from one industry to another, as pointed out by Carman. Also, Carman, Reidenbach and Sandifer-Smallwood, and Babakus and Mangold stated that the wording of the items should be changed to suit the nature of the industry under study.

Carman, in addition to Babakus, Boiler, Cronin and Taylor, proposed replacing the expectation-perception model with a post-encounter perception model, because from their point of view, the expectation-perception model is less useful.¹⁹⁶

Another researcher reported that the information derived from SERVQUAL implications is too general to offer accurate information for the decision maker.¹⁹⁷ On the other hand, other researchers criticize the five dimensions structure of SERVQUAL: for example, Hentschel argues against the validity and reliability of the five dimensions of SERVQUAL, stating, "The concept is fuzzy".¹⁹⁸

Haller studied consumer satisfaction in the retail business using the SERVQUAL model, and she argues that while SERVQUAL may be

Enhance knowledge development in marketing, American Marketing Association, Chicago, 1993, pp. 1-6.

¹⁹⁵ Large, D.W., and More, R.A., "The behavior sub-dimensions of sales and service quality, An implication for SERVQUAL", *Working paper*, University of Ottawa, Ottawa, 1994.

¹⁹⁶ 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.

¹⁹⁷ Wuhler, 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.

¹⁹⁸ *Ibid.*, pp.1-12.

characterized as reliable, it is not shown to be "generalizable" across the retail settings.¹⁹⁹

Moreover, the gap concept for measuring service quality was criticized by a number of researchers, such as Carman. Carman acknowledged that there is some theoretical and empirical evidence to support the relevance of the gap concept. However, in his study of SERVQUAL dimensions, he stated that these are not "generic", as the customer does not have past experience on which to base his expectations about the level of service quality he desires. Other researchers have suggested better wording for the scale items and a straightforward, performance-based approach to measuring service quality.²⁰⁰

However, the main criticism centres on the concept of the SERVQUAL structure and the consistency of SERVQUAL dimensions measurements across the industries.²⁰¹ For instance, Teas argued that SERVQUAL suffered from an operational definition problem, in that the word "should" in SERVQUAL expectation items may prompt the customer to exaggerate his rating. Parasuraman later suggested replacing "should" with "would". In addition, he suggested that the misinterpretation of expectation items stems from the variance existing in the customer's responses.²⁰²

Cronin studied the relations between service quality and customer satisfaction and purchasing intention. His results indicate that service quality is a determinant of customer satisfaction, and that a performance-based measurement tool has superiority and efficiency in measuring service quality. On the other hand, he found that customer satisfaction has a great influence on the intention to re-purchase.²⁰³

¹⁹⁹ Haller, Sabine, "Measuring service quality: The results of a longitudinal study in further education", Paul Kunst, and Jos Lemmink (eds.), *Managing service quality*, Paul Chapman Publishing Ltd, London, 1995, pp.13-27.

²⁰⁰ Palmer, Adrian, *Principles of service marketing*, Dementfort University, McGraw-Hill Book Company Europe, Berkshire, 1994, p.181; and Getz, Donald, et al., "Service quality evaluation at events through service mapping", *Journal of Travel Research*, Vol. 39. No. 4, Boulder, Colorado, U.S.A., May 2001.

²⁰¹ Ibid.

²⁰² Teas, R. Kenneth, "Expectation, performance evaluation, and consumer's perception of quality", *Journal of Marketing*, Vol. 57, No. 4, Oct. 1993, New York, p.18.

²⁰³ 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.

Interestingly, Cronin and Taylor mentioned that while SERVQUAL is better as a diagnostic tool to measure service quality, performance-based measurement is superior, particularly when measuring long-term attitudes towards service quality, since, from their point of view, the perception of performance is the only valid parameter that has an influence on service quality.²⁰⁴

Despite Webster's claim that the expectation level of the customer is based on the customer's characteristics, Weitzel et al. support the argument that there are different factors forming customers' expectations.²⁰⁵

Francis summarized the criticism directed at SERVQUAL in two ways: first, from a theoretical perspective, where it is remarked that the SERVQUAL model is based on the disconfirmation concept, rather than on measuring the attitudes of customers. In addition, the inter-correlation between the SERVQUAL dimensions and the function-based process does not make it a universal model. Secondly, from an operational perspective, many issues decrease the importance of the SERVQUAL model, such as the standardization of scale, the limited number of items forming each of the five SERVQUAL dimensions, the moment of truth, the polarity of the seven-point scale, the two parts of the questionnaire and the variance score between dimensions.²⁰⁶

3.8 The Value of SERVQUAL and its Implications

Despite these criticisms, SERVQUAL has become the standard service quality measurement model and is extensively used and widely applied by practitioners and academic researchers.²⁰⁷

Simon Cooke stated that despite the criticism directed at SERVQUAL for its dependency on the variables and questions comprising the model, it still provides a valuable tool for managers. He also mentioned that SERVQUAL

²⁰⁴ Cronin, J. Joseph and Steven A. Taylor, "SERPERF versus SERVQUAL: Reconciling performance-based and perceptions-minus expectations measurement of service quality", *Journal of Marketing*, Vol. 58, January Issue, 1994, pp. 125-131.

²⁰⁵ Jensen, John B. and Robert E. Markland, "Improving the application of quality conformance tools in service firms", *Journal of service marketing*. Vol. 10, No.1, 1996, p. 35.

²⁰⁶ Buttle, Francis, "SERVQUAL: Review, critique, research agenda", *European Journal of marketing*, Vol. 30, Issue 1, 1996.

²⁰⁷ Ibid.

supports traditional methods such as the mystery shopper and complaints, and that it supports qualitative analysis to highlight the key areas of service quality.²⁰⁸

Because of this, many investigators have relied on SERVQUAL to measure service quality in many areas of business. One of the studies in this area is that undertaken by Subramani and Henderson, which uses SERVQUAL to measure the effect of the similarity of views concerning six dimensions among information system user groups in three large organizations. A sample of 96 managers was taken from among the users group. The results demonstrated that the establishment of strong relationships among the groups of users of the information system in the organization was crucial to the delivery of a high service quality.²⁰⁹

In addition, the study also showed that the compatibility of the six dimensions of Henderson's relations model (namely, the nature of mutual benefits, the standard of commitment, the standard of assurance, the extent of knowledge exchange, the standard of excellence in ability and efficiency, and organizational tightness) is an important factor in influencing the efficiency of the information system groups, which is reflected in the quality of the products and services delivered by those groups. In addition, other factors, such as the nature of the social relations among the groups, the nature of information exchanged between the groups, and the ability of each group to influence the other groups, have a powerful effect on perceptions of service quality.

In the same context, and in the Middle East region, Al Sayyid used SERVQUAL in a study aimed at testing the relation between the concepts of "service culture" and service quality in the hospitality industry, and at determining the relative importance of these concepts and the factors affecting the standard of service quality. The study carried out the measurement of service culture in the area of hotel services by selecting five hotels and their branches in Alexandria and Cairo. The response rate for the managers group was 91 per cent, for

²⁰⁸ Jensen, John B. and Robert E. Markland, op. cit., p. 35.

²⁰⁹ Subramani, R. and Henderson John C., *Gaps that matter: The influence of perspectives on IS service quality*, System Research Center, Boston University, 1996.

employees, 51.8 per cent, and for guests, 34.2 per cent. The findings of this study show the importance of the management's commitment to the concept of excellent quality, the management's ability to set specific and clear aims for the workforce, the ability to activate service performance, a high level of confidence in the ability of the hotel to deliver an excellent service to customers. It stated that confidence in the ability to deliver an excellent service quality is the most important factor since this assists in building the service culture in the organization; it also increases the degree of commitment and understanding of employees in relation to the importance of quality and spreads the philosophy of service at all levels and among the workforce.

In addition, the researcher established that SERVQUAL has adequate stability and validity in relation to measuring a service culture in hotels, so that it would be possible to rely on this measurement tool in any future studies concerned with service quality in the area of hospitality services. The study established the existence of a proportional correlation between the factors affecting the service culture and the perceived service quality.

The study also discovered the existence of a proportional correlation between concepts related to team spirit, the degree of suitability of individuals to their positions (role ambiguity), the degree of suitability of the used technology to the nature of the required work, the degree of perceived control over emergency situations, the systems of flexible supervisory control and the existence of good horizontal contacts, and the concept of perceived service quality from the point of view of customers on the one hand, and the relative importance of the service quality dimensions as seen by customers on the other. The horizontal contacts came first, followed by the degree of suitability of individuals to their jobs, then the suitability of technology to the nature of the work, and in last place, the ambiguity of role. Finally, the study reveals the existence of a disproportional correlation between role conflict and role ambiguity, on the one hand, and the perceived quality of service, on the other.²¹⁰

²¹⁰ Al Sayyed, Ismaeel, "The effect of organization culture factors on service quality", *The Journal of Commerce Faculty for Scientific Researches*, Alexandria University, Vol. 35, No. 1 Supplement, March, 1998.

In a similar manner, Rouhani used SERVQUAL to measure the quality of services offered by marketing consultancy offices in Australia and Singapore. The measurement of quality was carried out by measuring the gap between the expectations and the perceptions of the customers of the marketing service consultancy offices in both countries. When applying the measurement to a sample of registered companies in the Australian and Singaporean bourses, the response rate obtained was 21 per cent for Australia and 23.6 per cent for Singapore.

The study pointed to a difference in expectations between the managers in Australia and Singapore, that in turn led to a difference in the perceived quality of the same industry in the two countries. This difference is explained as a reflection of differences in the cultural, economic and social aspects of Australia and Singapore. In addition, the researcher recommends that the marketing consultancy offices should establish plans and objectives for meeting customers' expectations and endeavour to eliminate the gaps that reduce service quality. The marketing consultancy offices should also design programmes that last for a number of months and depend on the follow-up and continuous analysis of the customers' expectations. Another of the recommendations concerns the importance of the effort to be made by the organizations working in this industry to use some strategies of customer expectation management through education and external promotion programmes or through the involvement of the customer in the decision-making process.²¹¹

The SERVQUAL scale has also been used to measure the service quality of academic advisory services. The study in this field indicated the importance of considering the academic advisory process to be a step in a long-term relationship with students, which makes it necessary to train the individuals responsible for academic advising to perform this task with a view to achieving high quality. The study also recommended the undertaking of a continuous assessment of the academic advisory system to render the service quality

²¹¹ Rouhani, Fariba, "Perceived quality of small to medium professional marketing consultancy service in Australia and Singapore", *Small Business Unit*, Curtin University of Technology Press, 1997, No. 9707.

processes more effective, and, together with this, the study underlined the importance of conducting research studies in the field of service quality.²¹²

SERVQUAL has also been used in the retail industry to measure consumer satisfaction across the retail setting, the aim of the study being to establish a classification of antecedents that contribute to consumer satisfaction and dissatisfaction. The study concluded that the trust which is demonstrated by the service provider in its customers is very important, and that this angle is absent in present quality research, where the amount of trust the customer places in the service provider is the only consideration. The study also examined the uncertainty connected with perceived quality, and clearly stated a number of elements affecting this uncertainty, such as prior experience, the proportion of search and degree of risk (which refers to whether the customer is a risk-taker or risk-averse), and the other type of risk, which refers to the possibility of an employee's failing to deliver the system.²¹³

Liljander and Standvik concentrate on exploring the relationship between perceived service quality and the intention to re-buy. The researcher used SERVQUAL to measure this relationship. The results indicated a strong relationship between price and quality (called the value concept), and defined the perceived value as the relation between perceived service quality and perceived price.²¹⁴

A large number of studies have concentrated on the measurement factors that form the service quality from the point view of both the perceptions and the expectations of the customers, and shed some light on the sub-variables responsible for forming those attitudes. Among others by Roest and Vehallen's study centres on improving the perceived level of service quality by the best managers, the expectations and the delivery of service quality which, unlike goods, is assessed by the customer and controlled by the provider. They

²¹² Shields, O. P., "Service quality and academic advising: Practicing what we preach", *Southwestern Marketing Association, Advance In Marketing*, 1995.

²¹³ Haller, Sabine, "Measuring service quality: The results of a longitudinal study in further education", Paul Kunst, and Jos Lemmink (eds.), *Managing service quality*, Paul Chapman Publishing Ltd, London, UK, 1995, pp.13-27.

²¹⁴ 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.

realized that the customer's expectations could be defined as pre-trial beliefs about the service quality, and could be used as a standard or reference point for the assessment of service quality.²¹⁵ In addition, Teas proved the validity of SERVQUAL in solving the problem of service quality, and stated that the concepts of expectation and perception are clearly defined.²¹⁶

Mehta and Durvasula also used SERVQUAL to measure overall business-to-business service quality in the field of shipping in Singapore. In addition, they measured customer satisfaction in the field of shipping services and confirmed the existence of various service quality variables, such as Service Encounter, Moment of Truth, and Boundary Spanning that must be measured and studied.²¹⁷

In conclusion, Parasuraman et al., in a further study, support the multidimensional nature of service quality, and believe that SERVQUAL is better than the perception-based model, providing an accurate diagnosis of the problem of service quality, while the perception-based model concentrates on measuring the variance of perceived service quality. They argue that measuring perceived service performance alone results in an inaccurate measurement of service quality, and their final findings support the idea that the reliability dimension of SERVQUAL is the most important dimension, in contrast with the tangibles dimension, which is the least important.²¹⁸

3.9 Measuring Service Quality in the Banking sector

The banking industry is market-oriented and the main strategy of banks is to attract and retain their customers. Narver and Slater's definition of the

²¹⁵ Roest, Hank and Theo Vehallen, "Quality marks: Prospective tools in managing service quality perceptions", Paul Kunst and Jose Lemmink (eds.), *Managing service quality*, Paul Chapman, London, 1995, pp. 65-78.

²¹⁶ Teas, R. Kenneth, "Expectation, performance evaluation, and consumer's perception of quality", *Journal of Marketing*, American Marketing Association, Vol. 57, No. 4, New York, Oct. 1993, p.18.

²¹⁷ 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.

²¹⁸ Parasuraman, A., Valarie A. Zeithaml and Leonard L. Berry, "Reassessment of expectations as a comparison standard in measuring service quality: Implications for further research", *Journal of Marketing*, Vol. 58, January, 1994, pp.111-124.

customer-orientated business is "a business culture committed to the continuous creation of superior value for customers". On the other hand, obtaining marketing intelligence relevant to the needs of customer-focus is an effective method of reinforcing the customer-oriented culture of the banks, and in this regard, Kohli and Jaworski refer to "the organization-wide generation of market intelligence pertaining to current and future customer needs, dissemination of intelligence across departments and organization-wide responsiveness to which it represents the customer-focus culture."²¹⁹

banking industry exhibits two types of behaviour: one type places the emphasis on process, while the other type emphasizes satisfying its customers' needs, and thus two models of the innovation process are generated in business firms. The first of these is called the Technology-Push, which means the business firm depends on professional people, advanced equipment and tools, and that it aims to obtain innovative products. The second model is called the Demand-Pull model, where the business always works hard to identify the unmet needs of customers.²²⁰

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. SERVQUAL also provides details about the nature and the existence of quality gaps between the customers' expectations and their perceptions of the organization's service quality, and about the gap that exists between current organizational service quality standards and customers' expectations.²²¹

Interestingly, Al Sahan applied the gaps analysis model of Parasuraman and his associates to the banking sector in Alexandria in Egypt. This study aimed to test the extent of the perceived quality gaps from the point of view of the customers, and the importance of this in explaining the perceived quality of service and in identifying and analysing those organizational factors causing the

²¹⁹ McQuarrie, Edward F., *Customer visits: Building a better market focus*, SAGE Publications Inc., 1993, p 3.

²²⁰ Ibid., pp. 8-9.

²²¹ 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.

gaps. The study indicated the existence of a gap between the customer's expectations of service quality and the management's perception of these expectations. This finding suggested the necessity of relying on marketing plans, with the customer at the centre. Such plans should be based on accurate data, collected from market research, concerning expectations and perceptions of service quality from the customer's point of view.

Al Sahan has also concluded that the reliability dimension is the most important dimension in determining quality, followed by the dimensions of responsiveness and security. It is therefore essential to lay down the necessary guidelines based on an assessment of the relative importance of quality dimensions, and to encourage managers to maintain contact with customers. In addition, Al Sahan's study highlighted the weakness of the banks in the area of upward contact, and for this reason it recommended that an effort be made to narrow the gaps between management levels by strengthening contact through reports and regular meetings. The study also revealed the existence of a gap between the management's perception of the customers' expectations and the criteria laid down for service quality by management.

In this respect, Al Sahan's study recommended the spreading of the culture of service quality by means of the commitment of management to quality, to the development of quality, and to the determination of the criteria of quality within the organization. Another result of the study was the discovery of a delivery gap: that is, a gap between what is actually delivered and the criteria laid down for delivery by management. Therefore, the management has to recruit highly skilled and qualified employees and take an interest in devising suitable training plans for them. The management has also to authorize and empower these employees within suitable limits to perform their tasks in the best manner; and there should be an avoidance of exaggerated promises on behalf of the organization in the advertising and promotion media. In the same vein, it is necessary to target the customer when constructing marketing plans and selecting the right marketing mixture for internal and external customers.²²²

²²² Al Sahan, Mohammed Farid, "Service quality management: Study the influencing factors of perceived service quality by using gaps analysis model", *The Journal of Commerce Faculty for Scientific Researches*, Alexandria University, Vol. 31, No. 2, Second Supplement, September, 1994.

Subsequently, another study by Al Sahan used the SERVQUAL instrument to measure the service quality of banking services. He hypothesizes that there had been no agreement about the conceptual and operational framework for service quality. So there were differences of opinion concerning the measuring of the variables of expectations and perceptions of service quality, in addition to confusion regarding the concept of quality, directions, satisfaction and many other behavioural variables. His study was carried out in Alexandria in Egypt, where the study sample was drawn from the customers of commercial banks. Despite the low response rate of 53 per cent, the study revealed the necessity for identifying the way in which customers' expectations are formed and the sources from which they are derived, together with the necessity for directing these expectations when designing services: this is what is known as the concept of expectations management. Moreover, the study underlined the importance of continuity in measuring the customer's perceptions of service quality as the first step in the direction of improving and developing services. Attention should also be paid to delivering the service in the right way on the first occasion through the improvement of output and operations quality; this can be effected by taking care of the factors controlling the reliability dimension, which the study revealed to be the most important dimension. It was also found to be essential to set down a programme of total customer satisfaction as one of the strategies of service quality, since most studies have indicated the existence of a strong relation between satisfaction and service quality. Finally, the study made clear the importance of training immediate managers and service providers in methods of appropriate contact and interaction with customers in view of the fact that the loyalty of customers depends essentially on their assessment of the quality of the banking service delivered to them.²²³

Wuhrer conducted a study to measure the service quality of a banking group in Austria. He used a modified SERVQUAL model with ten dimensions which he applied to three banking segments. These were: commercial clients, the youth segment and the private segment. 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

²²³ Al Sahan, Mohammed Farid, "The perceived quality of banking service: An empirical study to test the quality determinants in the quality model", *The Journal of Commerce Faculty for Scientific Researches*, Alexandria University, Vol. 31, No. 2, September, 1994.

must be planned carefully and that the contingencies of the different features and branches of the bank should be taken into account.²²⁴

Moreover, he recommended that service quality level should be monitored frequently and that the top management must be involved by allocating a part of the company resources for this purpose. A Management Information System (MIS) should also be developed to ensure that feedback is obtained regarding the level of service quality in the company.²²⁵

In his examination of the antecedents that influence the level of service quality in the banking sector, Wuhrer defined specific factors which make a positive impression in major banking institutions, such as friendliness, helpfulness, cooperation, willingness to communicate, correctness, interaction skills, competence, personal attention, accessibility, promptness, discretion, honesty, information regarding professional advice and special offers.²²⁶

On the other hand, he defined another group of factors that produce a negative impression: for instance, the interest policy of banks; doubts about trustworthiness; arrogant personnel; incompetence; problems in the timing of the service; inaccurate, incorrect and missing information; sloppy, incorrect work; fees and expenses, and indiscreet behaviour on the part of personnel.²²⁷

Blanchard studied the retail banking business of one of the leading British banks to measure the level of service quality of the bank. He used a modified SERVQUAL model characterized by three dimensions: process and outcome, subjective and objective attributes and soft and hard attributes, the soft attributes being related to personal interactions and the hard attributes being related to physical aspects. He distributed questionnaires among the customers and employees of the TSB plc Bank in the United Kingdom, and concluded his findings by supporting the SERVQUAL model, demonstrating that it provides an

²²⁴ 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.

²²⁵ Ibid.

²²⁶ Ibid.

²²⁷ Ibid., p.3.

excellent framework for the analysis, classification and diagnosis of customer perceptions.²²⁸

Oppewal and Vriens studied the effect of changes in service quality dimensions on the consumer's perception of service quality in the banking industry, and they redefined the SERVQUAL dimensions to include four dimensions: the accessibility of the bank; the competence of bank personnel; accuracy and friendliness, and tangibles. In addition, they identified 28 attributes of those dimensions that express the perceived service quality in the bank. The preferences and decisions of the customer, that play a pivotal role in forming his perception of service quality, are also examined in this study. 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.²²⁹

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. A demographic analysis is also essential for a bank to determine the most important customer segment. For example, age is a key factor, and thus it is important to determine which elements of the service are most important to each age category. This confirms the findings of other studies in the field, which have shown that there is a strong correlation between the age factor and the intensive use of credit cards, purchasing intention, and the customer's needs, attitudes and behaviour. In addition, the study demonstrates the relationship between gender and service quality preference, gender playing

²²⁸ 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.

²²⁹ 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.

a pivotal role in marketing segmentation according to the income chip of each gender.²³⁰

Lepak recommended monitoring customer preferences continuously, and claimed that professionalism and uniqueness are the most important dimensions in the banking industry. In addition, reputation, friendliness, hours of operation and the ability to obtain finance easily from the bank are also influential factors. Furthermore, 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.²³¹

In another study, 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 a performance-based measurement instrument to identify more service quality variation. The researchers recommended that the business organization should improve tangible factors such as facilities and equipment. In addition, the behaviour of the contact person was found to affect the perception of the customer; the researchers therefore recommended that the organization should develop a culture of quality and improve its responsiveness. They also suggested setting up an employee motivation programme and managerial skills training programmes, covering subjects such as selling skills, training, role clarification and knowledge provision, since these are essential tools for enhancing the level of quality.²³²

In another study, 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,

²³⁰ Stafford, Marla Royne, "Demographic discriminators of service quality in banking industry", *Journal of Services Marketing*, Vol. 10, No. 4, 1999, pp.6-22.

²³¹ 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.

²³² Lee, Haksik, et al., "The determinants of perceived service quality and its relationship with satisfaction", *Journal of Service Marketing*, Vol. 14, No. 2/3, 2000, pp. 217-232.

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.²³³

Additionally, Lassar et al. studied the effect of service quality on customer satisfaction in private banking; their study measures the relation between service quality and competitive advantage and customer loyalty. The findings reflect the existence of a relationship between those variables and the enormous effect of communication on the formation of service quality in the banking sector, while SERVQUAL is found to possess a high level of validity and is recommended for measuring service quality in this sector particularly.²³⁴

Lassar et al.'s findings confirm those of Philip and Hazlett's study, which stated that SERVQUAL is a valid tool for diagnostic purposes, capable of revealing to managers the existing shortfalls in the service quality of their banks. 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.²³⁵

Avkiran used a modified SERVQUAL model with 34 items to measure the quality of the services provided by Australian commercial bank branches; found that the customer's needs could be the basis of customer segmentation: in other words, customers could be classified into groups according to their needs.²³⁶

Mu'alla measured the service quality of Jordanian commercial banks, using both a perception and expectation model, along with a performance-based model. The first of these was SERVQUAL and the second is called SERFPERF. The study outputs centre on the antecedents that exert an influence on customer

²³³ Lewis, Barbara R. and Sotiris Spyropoulos, "Service failures and recovery in retail banking: The customers' perspective", *International Journal of Bank Marketing*, Vol. 19, No. 1, 2000, pp. 37-47.

²³⁴ 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.

²³⁵ 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.

²³⁶ Avkiran, Necmi Kemal, "Developing an instrument to measure customer service quality in branch banking", *International Journal of Bank Marketing*, Vol. 12, No. 6, 1994, pp. 10-18.

judgment of service quality, showing that past experience or a history of dealing with banks, reputation, and technology are the crucial factors.²³⁷

Angur measured the service quality of a number of Indian banks using both the SERVQUAL and SERPERF models. The results of his study support the validity of the SERVQUAL model as a multidimensional model which provides the bank's management with diagnostic information regarding the service quality situation. The study also reported that responsiveness and reliability are the most important dimensions.²³⁸

Finally, Bahia used a modified SERVQUAL model to measure the quality of service of Canadian banks. The major objective of this study was to standardize the validity and reliability scale. The study used the marketing antecedents which have been referred to as the Seven Ps, namely: products and services, place, process, participants, physical surroundings, price and promotion.²³⁹

3.10 Measuring the Service Quality of Islamic Banks

A study undertaken by Othman and Owen was carried out for the Kuwait Finance House (KFS), and suggested that a modified SERVQUAL model, which they called CARTER, should be employed by the Islamic bank's management to measure the level of service quality and the level of customer satisfaction resulting from it.

The modified model of SERVQUAL that was introduced by the researchers is based on five dimensions selected from the original SERVQUAL dimensions, in addition to a new dimension specially tailored to suit the nature of the Islamic banking business, which they called Compliance. The Compliance dimension contains new items which follow Islamic principles: no interest either paid or

²³⁷ Mu'alla, N., "Measuring the quality of the bank services provided by the commercial banks operating in Jordan", *Derasaat Journal of Management Science*, Vol. 25, No. 2, 1998, pp. 357-374.

²³⁸ 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.

²³⁹ Bahia, Kamilia and Jacques Nantel, "A reliable and valid measurement scale for the perceived quality of banks", *International Journal of Bank Marketing*, Vol. 18, No. 2, 2000, pp. 84-91.

taken on savings and loans; the provision of Islamic products and services; the provision of interest-free loans; and the availability of profit-sharing investment products.

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.

The study concluded that the KFH is rated as good, but not as the ideal bank from the point of view of its customers, since customers are not highly satisfied with the bank's profits, the time spent conducting a business transaction at the counter, and the length of waiting time before the customer is served.²⁴⁰

A study organized by the Secretariat General of the Cooperation Council of the Arab States of the Gulf (GCC) examined the effects of the criticism directed at Islamic banks on customer satisfaction. The study took the state of Qatar as a model to distinguish those factors that have the most significant effect on dealings with Islamic banks. In addition, the public attitude toward Islamic banks is investigated in order to evaluate the global service quality of those banks. The main point emerging from this study is that the interest element is a highly influential factor. Also, the study found that the majority of Islamic bank customers are transferring their savings from conventional banks and satisfying their financial needs at Islamic banks because conventional bank accounts are interest-bearing accounts.²⁴¹

In addition, 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, the introduction of

²⁴⁰ 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: <http://www.islamic-finance.net/journal.html>, [Accessed on 25 May 2004].

²⁴¹ —, "Service quality", *Alwatan Quarterly journal*, The Secretariat General of the Cooperative Council for the Arab States of the Gulf, Riyadh, KSA, No. 47, March 1998, pp. 247-283.

new products and services, the provision of a high yield on deposits, and the continuous improvement of effective and efficient operations.²⁴²

In addition, Islamic banks must set up systems to provide information about the level of brand equity, market effectiveness, the development of new products and services, and to measure customer satisfaction, since profitability can be achieved only by improving the quality of services and products and by securing the customer's loyalty through flexibility, innovation and customer responsiveness.²⁴³

Metawa and Al-Mossawi studied customer behaviour in Islamic banks in Bahrain. The study attempted to measure a number of service quality antecedents, such as the customer's profile, customer's awareness, and customer's satisfaction, that have an assumed influence on the customer's rating of the service quality of Islamic banks. They found that contact persons must have adequate motivation and be equipped with state-of-the-art technology in order to serve the customer better.

Accordingly, they 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. These findings are consistent with those of a study undertaken by Hegazy, who added social commitments to the group of service quality antecedents of Islamic banks.²⁴⁴

In addition, Motawa and Al-Mossawi stated that the importance of those antecedents is drawn from many factors, such as the type of bank - Islamic or conventional - the educational level of the customer, and the customer's age,

²⁴² 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.

²⁴³ *Ibid.*, pp. 187-203.

²⁴⁴ 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.

income and occupation. The study also revealed that compliance with Islamic Shari'ah is extremely important for Islamic banks, and management is encouraged to implement training programmes and to launch advertising campaigns to bridge the gap between customer awareness and the availability of Islamic banking substitutes.²⁴⁵

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.²⁴⁶ 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. Consequently, they recommended a continuous evaluation of the level of service quality and the implementation of a service quality policy, in order that the banks should be able to compete and acquire a competitive advantage in the market. They also stated that reliability, responsiveness and assurance were the less important dimensions.²⁴⁷

The main criticisms directed at Al-Tamimi and Al-Amiri's study are, however, related to the use of the original SERVQUAL model, and to the fact that the

²⁴⁵ 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.

²⁴⁶ 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.

²⁴⁷ Al-Tamimi, Hassen 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.

study was carried out on two Islamic banks only, and that it covered a limited number of branches. Thus, the study results cannot be generalized.²⁴⁸

3.11 Conclusion

The previous discussion has demonstrated that the SERVQUAL model possesses a high degree of reliability and validity for measuring service quality in business firms in general, and in the banking sector in particular.

It should be stated that many studies have measured service quality in banks operating in different cultures, and the results of these studies indicate that a number of antecedents form the customer's perception of service quality in banks. For instance, the bank's location, branding, price, word of mouth communication, physical setting, reliability and confidentiality, parking facilities, opening hours, innovation, employees' empowerment and rewards, financial achievements, queuing times, and the availability of technology-based banking, such as internet banking, mobile banking, telephone banking, direct access, television banking and telemarketing. The antecedents related to employees are commitment and attentiveness, flexibility, friendliness, courtesy, competence, awareness of the bank's products and services, willingness, responsiveness and assurance.

In concluding, in order to overcome the shortcomings of the SERVQUAL model, it is suggested that a modified model be developed, based on the SERVQUAL dimensions, to measure the service quality of Islamic banks. This modified model should reflect the unique characteristics of this kind of business, by incorporating an additional dimension into the original SERVQUAL model which takes into account Islamic banking themes.

The next chapter will discuss in details Islamic banking in the United Arab Emirates.

²⁴⁸ Al-Tamimi, Hasein 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.

Chapter Four

Islamic Banking in the United Arab Emirates

4.1 Introduction

Recent studies have shown that the service sector, including banking, makes a significant contribution to the Gross Domestic Products (GDPs) of the Gulf Co-operation Council (GCC) states.²⁴⁹ Moreover, today, 300 Islamic financial institutions are operating around the globe, with assets worth over US\$ 200 billion and growing by 15 per cent annually.²⁵⁰ Islamic banks in the Gulf States have exhibited a 10 per cent growth,²⁵¹ although the financial market of the Gulf is characterized by increasing globalization, developing technologies, deregulation and marketing-oriented business.²⁵²

The United Arab Emirates (UAE) has demonstrated a considerable improvement in economic performance during the past five years. According to the UAE Central Bank, the UAE achieved a 21 per cent growth in Gross Domestic Product during 2003, and its GDP has become the second largest among those of the GCC states, after Saudi Arabia. The other GCC countries are Saudi Arabia, Kuwait, Oman, Qatar and Bahrain, and their GDPs during 2003 were 56 per cent, 10 per cent, 6 per cent, 5 per cent and 2 per cent respectively.²⁵³

This chapter will examine the performance of the banking system in the United Arab Emirates. It will also shed some light on the history of Islamic banks in the UAE, beginning in 1975 with the establishment of the Dubai Islamic Bank, the

²⁴⁹ Bhattacharyay, Biswa N., "The prospects and challenges facing GCC banks and future policy directions and strategies", *International Journal of Bank Marketing*, Vol. 13, No. 1, 1995, pp. 35-44.

²⁵⁰ Wilson, Rodney, "The evaluation of the Islamic finance system", Simon Archer and Rifaat A. Abdel-Karim, (eds.), *Islamic finance: Innovation and growth*, Euromony Books and AAOIFI, London, 2004, p.19.

²⁵¹ Hassoune, Anouar, "Key rating factors for Islamic banks", *The Banker*, Vol.153, No. 924, Feb. 2003, p. 12.

²⁵² Bhattacharyay, Biswa N., op. cit., pp. 35-44.

²⁵³ Al-Hamiz, Saeed, "UAE banking trends", *Bankers' Day Seminar*, Fujairah Free Zone, 24 May, 2004, Fujairah, UAE.

first Islamic bank in the world. The performance of other Islamic banks, such as the Abu Dhabi Islamic Bank and the Sharjah Islamic Bank will then also be investigated.

4.2 The Structure of Banking in the UAE

The UAE's banks invested heavily in infrastructure and in industrial development when the federation of United Arab Emirates was first formed in 1971. The government budget was directed mainly towards financing infrastructure projects and public services utilities such as health care and education, while banks participated in providing the manufacturing and construction companies with the financing they needed.

Today, the UAE banking network is a modern network, working to a high professional standard. In 2003, there was a total of 47 banks owning 433 branches. It appears that no efforts are being spared to achieve a rapid growth and to overcome both local and international competition by implementing customer services programmes and introducing state-of-the-art technology.

As a result of the open market policy being pursued by the UAE government, which has resulted from the signing of a number of international trading agreements such as the World Trade Organization (WTO) agreement, the number of banks operating in the country has increased sharply. Table 4.1 shows the number of banks operating in the UAE at the end of the year 2003.

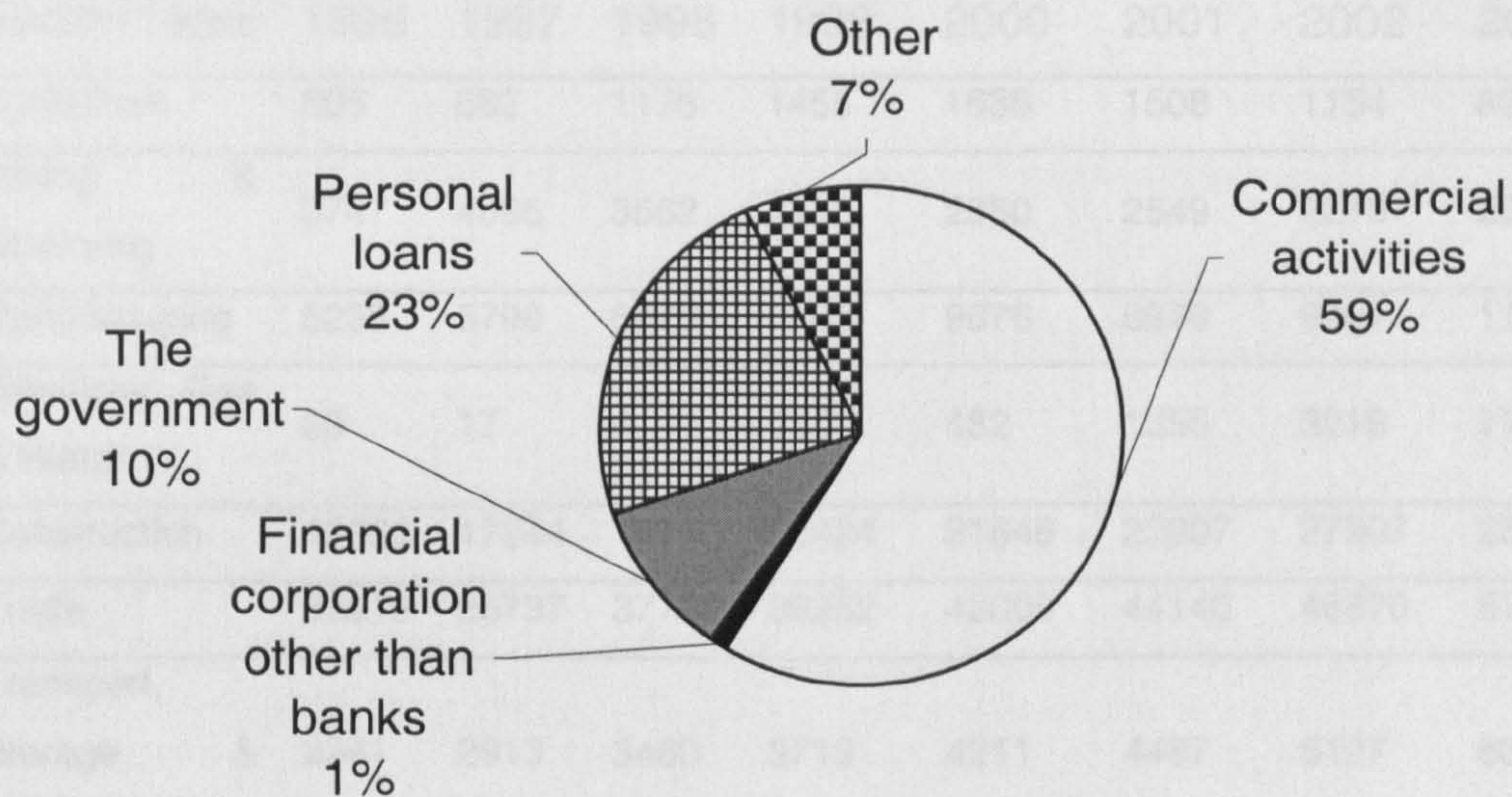
Table 4.1 Number of banks operating in the UAE in 2003

Local Banks			Foreign Banks		
Head offices	Branches	Total	Head offices	Branches	Total
22	346	368	25	87	112

Source: Central Bank of the UAE, Quarterly Statistical Report, 2004, Vol. 24, No. 1.

Recently, the major sectors in which the banks are investing are commercial activities and personal needs, with commercial activities alone accounting for 58.5 per cent of the total credit pool. The distribution of credit facilities provided by the banks to the population of the UAE at the end of 2003 is shown in Figure

Figure 4.1 Distribution of Banking Credit According to Beneficiaries in 2003



Source: Economic report, Ministry of Planning of The United Arab Emirates, available from: <http://www.uae.gov.ae/mop/eco-report>, [Accessed on 14 October 2004].

In addition, Table 4.2 illustrates the type of economic activities to which banks in the UAE have directed their credit. It clearly shows that the credit portfolio of the UAE banks at the end of 2003 had increased by 59 per cent since 1996, reflecting the fact that the country's economy is facing an increasing demand for bank credit from all business activities; in particular, manufacturing, power projects, construction, government projects and trade are the business activities with the highest rates of growth in the UAE.

Banking credit is distributed among ten sectors in the UAE, as may be seen from Figure 4.2, which illustrates the banking credit distribution in 2003. Total bank credit amounted to 152,598 million AE Dirham in 2003, with trade activity claiming the biggest portion (38 per cent), followed by credit allocated to construction activities (18 per cent), while government, other activities, manufacturing and electricity, gas and water accounted for 13, 9, 7 and 7 per cent respectively.

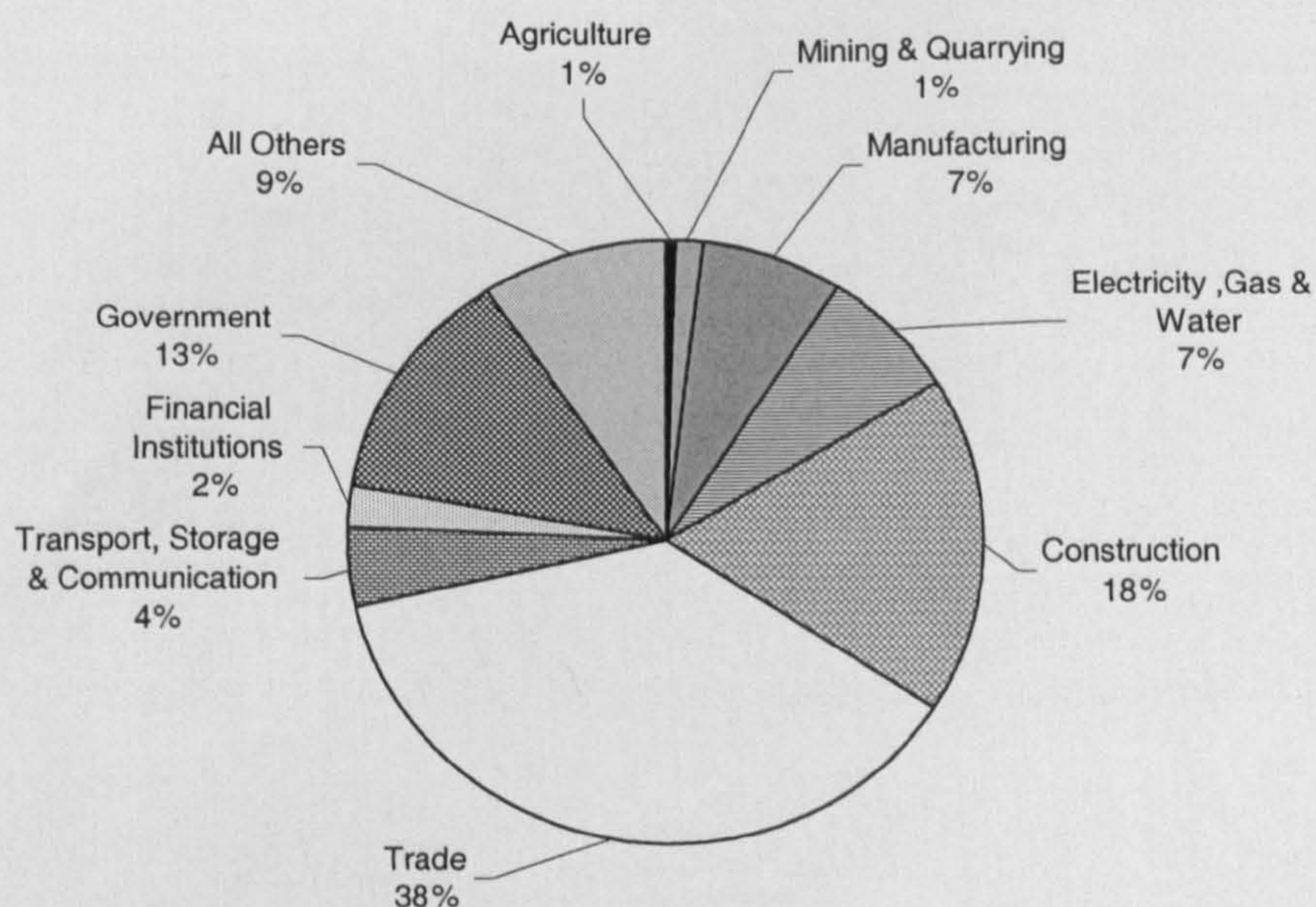
²⁵⁴ Economic report, Ministry of Planning of The United Arab Emirates, available from: <http://www.uae.gov.ae/mop/eco-report>, [Accessed on 14 October 2004].

Table 4.2 UAE Banks Credit by Economic Activity
(Millions of Arab Emirates Dirham)

Sector/Years	1996	1997	1998	1999	2000	2001	2002	2003
Agriculture	506	682	1176	1455	1636	1508	1154	830
Mining & Quarrying	3747	4095	3562	3176	2950	2549	2213	2077
Manufacturing	5235	5799	6976	8752	9676	8978	9901	11082
Electricity, Gas & Water	29	17	4	146	482	1356	3219	11110
Construction	15662	17944	18770	20424	21646	23907	27907	26845
Trade	33913	25737	37739	39252	42008	44140	48870	57053
Transport, Storage & Communication	2261	2913	3460	3719	4211	4487	5127	6325
Financial Institutions	1352	1580	2153	1857	1983	1953	1903	3372
Government	10394	9105	12719	15725	12581	10581	10565	19650
All Others	22058	27542	7130	8119	9221	9545	12512	14254
Total	95157	95414	93689	102625	106394	109004	123371	152598

Source: Central Bank of the UAE, *Quarterly statistical report*, 1998, Vol. 18, No. 1, 2000, Vol. 20, No. 2, 2001, Vol. 21, No.1, 2003, Vol. 23, No. 3, 2004, Vol. 24, No. 1.

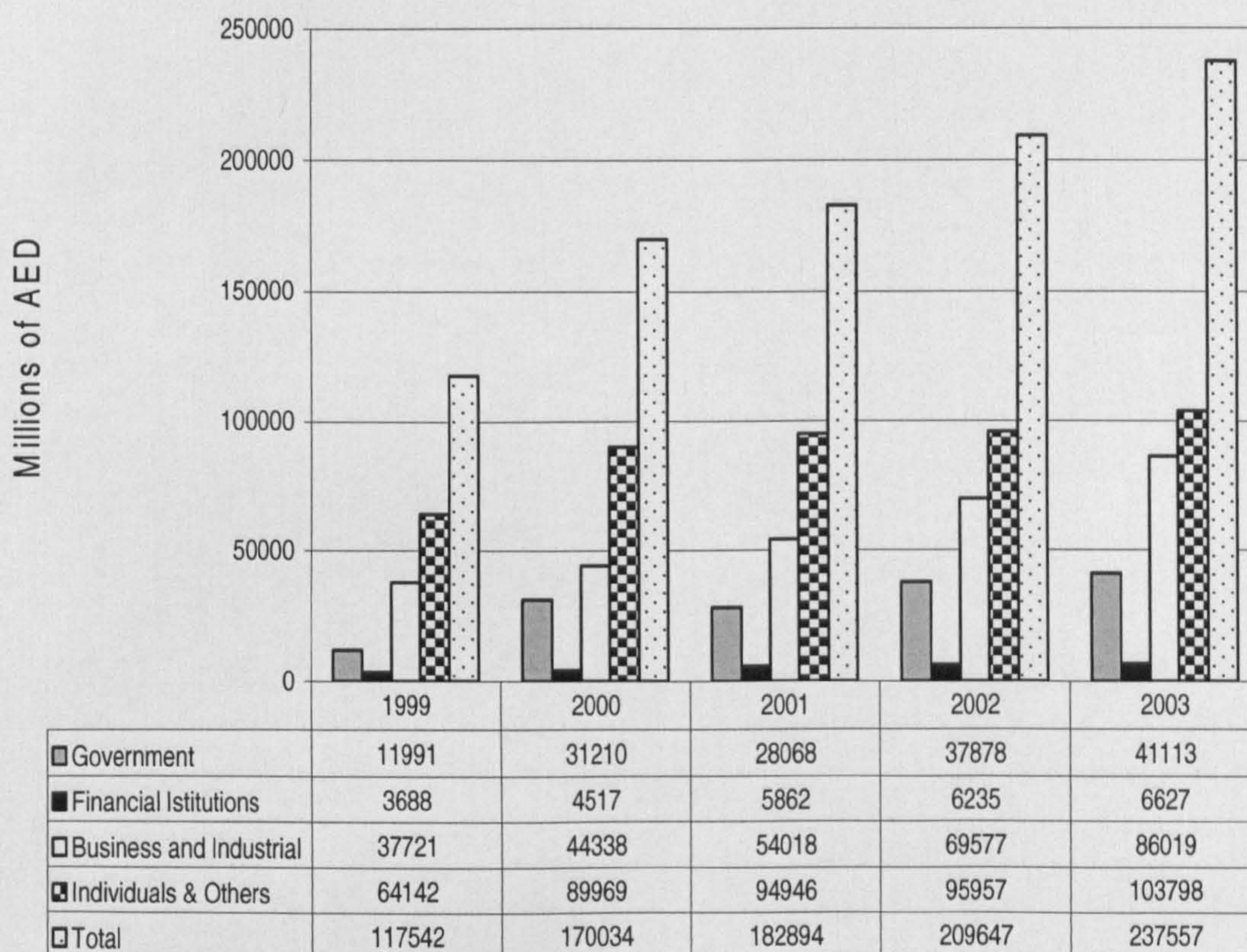
Figure 4.2 Banking Credit Distribution According to Business Activity in 2003



Source: Central Bank of the UAE, *Quarterly statistical report*, 1998, Vol. 18, No. 1, 2000, Vol. 20, No. 2, 2001, Vol. 21, No.1, 2003, Vol. 23, No. 3, 2004, Vol. 24, No. 1.

Figure 4.3 illustrates the aggregate deposits of the UAE banks, and it can be seen that the major sources of deposits are individuals and companies: in 2003 the total deposits of UAE banks amounted to 237,557 million AE Dirham, mobilized from individuals, private companies, government and public companies, providing 43.7, 36.2, 17.3 and 2.8 per cent of deposits respectively.

Figure 4.3 Bank Deposits According to Ownership
(Millions of AED)



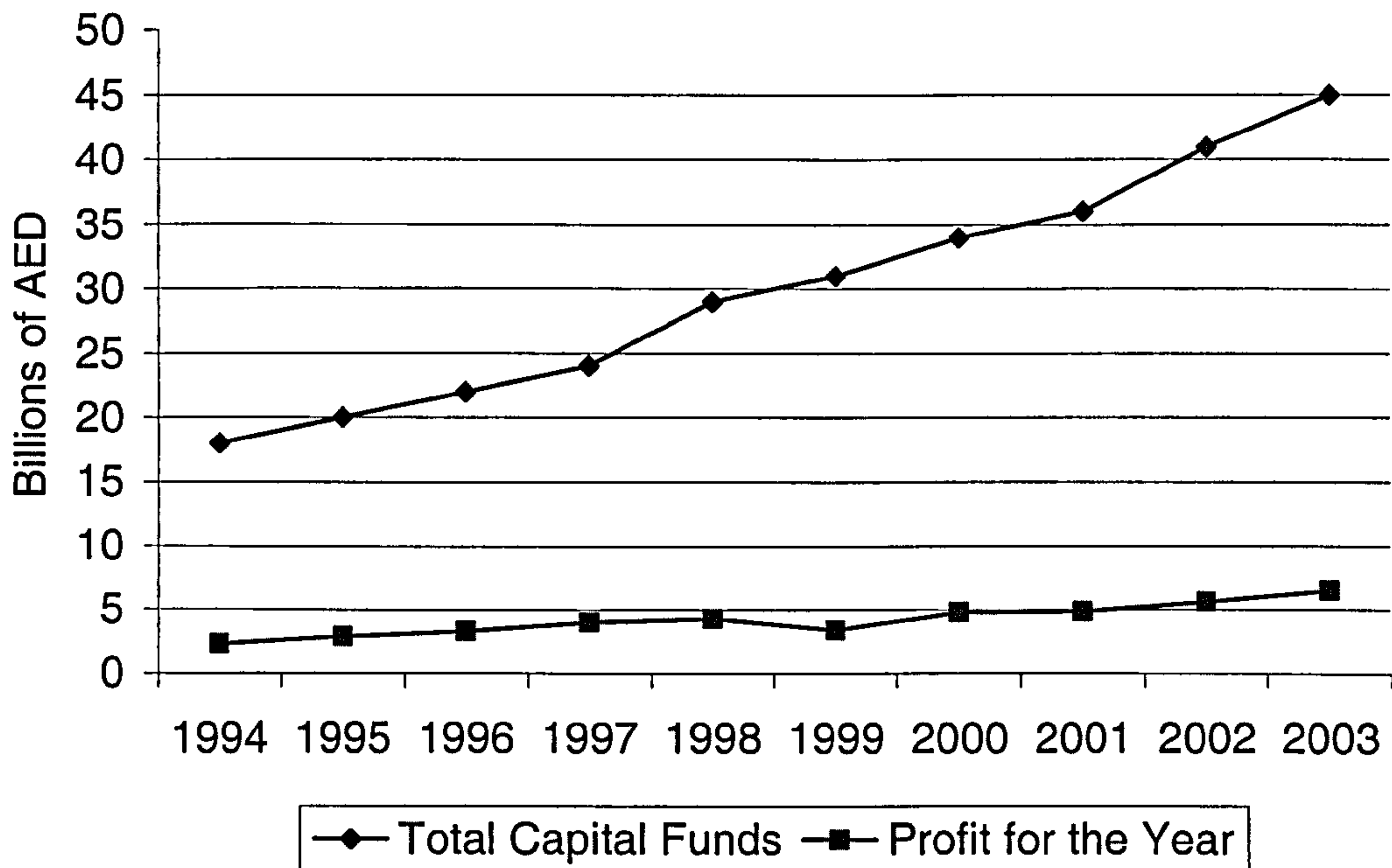
Source: Economic report, Ministry of Planning of The United Arab Emirates, available from: <http://www.uae.gov.ae/mop/eco-report>, [Accessed on 14 October 2004].

In this regard, the UAE's banks have been achieving a steady growth since 1994, with stability in the economic and legal environments contributing significantly to this result. This achievement is reflected in Figure 4.4, which shows the growth in aggregated capital funds and profits of the UAE's banks.

It is evident from Figure 4.4 that the UAE's banks were able to record a substantial overall growth in their profits from 1994 until 2003, in spite of an unexpected drop recorded during 1999. It appears that this noticeable drop in the UAE's banks' profits in 1999 was related to three major factors: firstly, an

increase in competition in the market from small and mid-range banks that made considerable changes in their business vision and strategies, especially in the use of extravagant advertising campaigns designed to help them retain customers. Examples of such banks are the First Gulf Bank, Ras Al Khaimah Bank (RAK), Um Al Qaiwain Bank and Al Ittihad National Bank.

Figure 4.4 UAE Banks' Performance



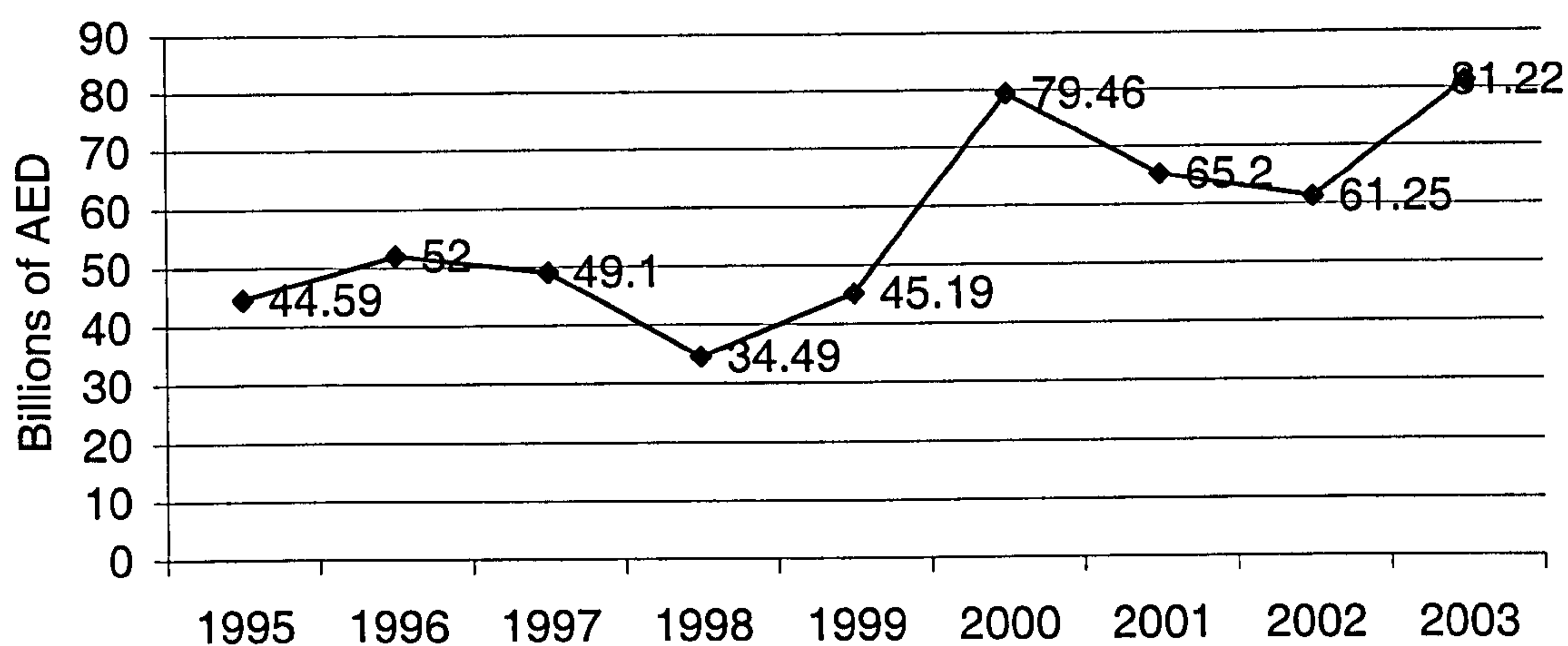
Source: Economic report, Ministry of Planning of The United Arab Emirates, available from: <http://www.uae.gov.ae/mop/eco-report>, [Accessed on 14 October 2004].

Secondly, the crisis in stock speculation in the UAE market that occurred at that time indicated that the stocks market was still not well organised. As a result, many people and companies suffered substantial losses and were obliged to declare themselves bankrupt, which in turn affected their ability to save or to apply for more credit from the banks on the one hand, and, on the other hand, meant that they were unable to fulfil their existing repayments obligations to the banks.

Thirdly, the banks' performance in the United Arab Emirates was also affected by the decline in the price of oil during 1998; on account of this, many government projects and tenders had been postponed and the financial institutions lost the chance to invest more funds in financing government projects.

Table 4.5 illustrates the development of crude oil exports by the UAE government from 1995 until 2003.²⁵⁵

Figure 4.5 Crude Oil Exports in the UAE



Source: Central Bank of the UAE, *Quarterly statistical report*, 2000, Vol. 20, No. 2, 2003, Vol. 23, No. 3, 2004, Vol. 24, No. 1

Table 4.3 shows an aggregate balance sheet which clearly demonstrates that the banking system in the United Arab Emirates produced an impressive performance by recording a handsome growth.

²⁵⁵ Central Bank of the UAE, *Quarterly statistical report*, 2000, Vol. 20, No. 2, 2003, Vol. 23, No. 3, 2004, Vol. 24, No. 1.

**Table 4.3 Aggregate Balance Sheet of the UAE Banks
(Millions of AED)**

	1997	1998	1999	2000	2001	2002	2003
Cash deposit with CB	12784	12041	16115	25593	27624	25059	27283
Due from resident banks	8017	10610	11560	10775	14640	15995	15362
Foreign Assets	76720	81932	11560	91457	97521	110732	111727
Domestic credit & Investment	107334	123830	134715	141651	5063	6452	6886
Claims on Government	9105	12719	15725	12581	10565	15222	19650
Claims on official entities	5507	5231	5571	5770	4830	6454	12215
Commercial papers	2985	2825	3108	3610	4114	4727	5917
Real estate mortgage loan	7253	8056	9685	9277	10347	11897	10472
Loan administrator & overdraft	79089	5231	96303	105148	113524	125408	146380
Claims on other financial institutions	1580	2153	1856	1984	1953	1903	2272
Domestic investment	1815	2222	2467	3281	5063	6452	6886
Unclassified assets	6025	6657	6894	7625	7600	7701	8744
Total Assets	210880	235070	251091	277101	297781	331550	366908
Demand Deposits	359	308	412	524	441	436	610
Time Deposits	41515	41698	47440	61819	68551	71613	76241
Savings Deposits	8245	8399	7821	8677	9866	11470	13133
Commercial Prepayment	1157	1213	1263	1223	1406	1953	2620
Other Deposits	18570	19731	23354	35754	37193	41563	50344
Foreign Liabilities	45734	53332	54570	26584	28789	28247	30294
Government Deposits	6948	10920	11671	30837	27382	36972	40133
Loans from Government	92	77	62	41	37	28	23
Due to Central Bank	84	71	81	80	52	116	163
Capital & Reserves	25417	29929	31957	34273	36817	41023	44455
Due to Resident Banks	8037	10225	11710	10901	15196	17427	17899
Unclassified Liabilities	37015	39886	41182	42862	43565	46022	47126
Memoranda Acc.	162430	194786	202170	251603	274486	334635	412193

Source: Central Bank of the UAE, *Quarterly statistical report*, 1998, Vol. 18, No. 1, 2000, Vol. 20, No. 2, 2001, Vol. 21, No.1, 2003, Vol. 23, No. 3, 2004, Vol. 24, No. 1.

4.3 The UAE Islamic banks

Notwithstanding the large number of banks operating in the United Arab Emirates, by the end of 2003 there were only three fully-fledged Islamic banks operating in the country: the Dubai Islamic Bank, the Abu Dhabi Islamic Bank,

and the Sharjah Islamic Bank.²⁵⁶

In 1985, federal law number (6) was passed, mainly to assist the establishment of Islamic banks in the United Arab Emirates, and this law grants national and international Islamic banks the right to provide all kinds of banking activities, including establishing business enterprises, as long as they are operated according to the principles of Islamic *Shari'ah*. (See Appendix A)

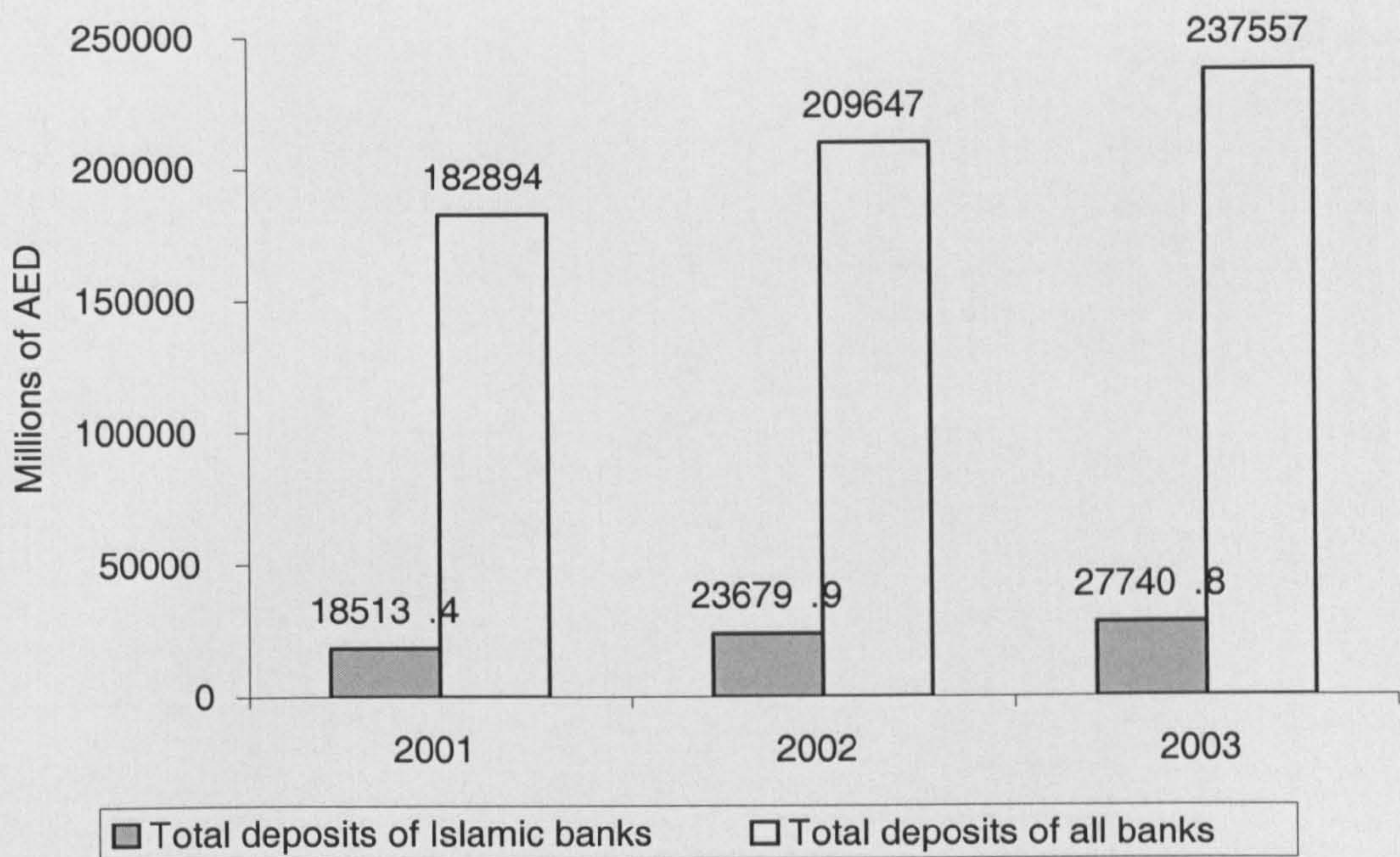
In addition, this law granted some exemptions from federal law number (10) (1980), which related to central bank authority over the financial system in the UAE. In particular, Islamic banks are exempted from article (90) clause (a) of federal law number (10) of 1980, which clearly prohibits financial institutions from engaging in non-banking operations, such as those involving commercial and industrial activities or trade in goods. Also, with regard to article (90) clause (b) of the same law, Islamic banks are exempted from the law prohibiting financial institutions from acquiring movable properties unless purchased for conducting their business or for accommodating their employees. Finally, article (96) clause (e) exempts Islamic banks from the authority of the central bank to interfere in determining the interest rate, the commission to be paid by the bank on deposits and the commission to be collected from customers.²⁵⁷

The importance of Islamic banks in the UAE is increasing rapidly, as a result both of customers' trust and of the significant financial results achieved by the banks. This has led to an increase in the Islamic banks' deposits over the last three years (2001, 2002 and 2003), as their book value represented 10, 11.3 and 11.7 per cent respectively of the total UAE banks' deposits. Also, the total assets of Islamic banks in the UAE recorded significant growth: from 7.9 per cent in 2001 to 9.45 per cent in 2003. Figures 4.6 and 4.7 illustrate the development of the deposits and assets of Islamic banks in the UAE compared with the total deposits and assets of the UAE's banks.

²⁵⁶ UAE Central Bank, *Annual report*, 2003, Available from: <http://www.uaecb.gov.ae/annual-report.htm>, [Accessed 10 June 2004].

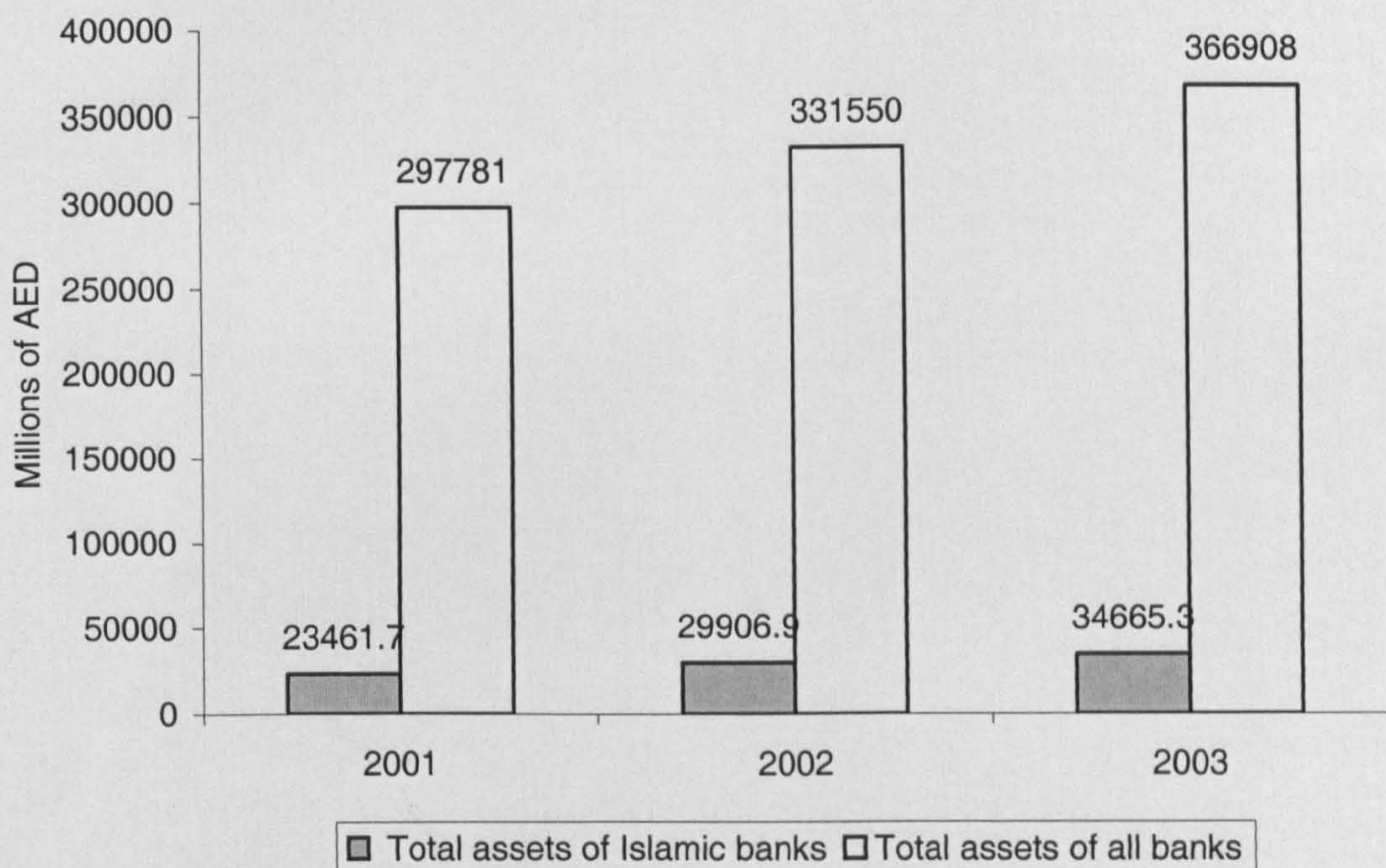
²⁵⁷ Ibid.

Figure 4.6 Islamic banks' deposits share in the UAE



Source: Emirates Banks' Association Reports, *The financial position of commercial banks in the UAE, 2001, 2002, 2003.*

Figure 4.7 Islamic banks' assets as a proportion of total bank assets in the UAE

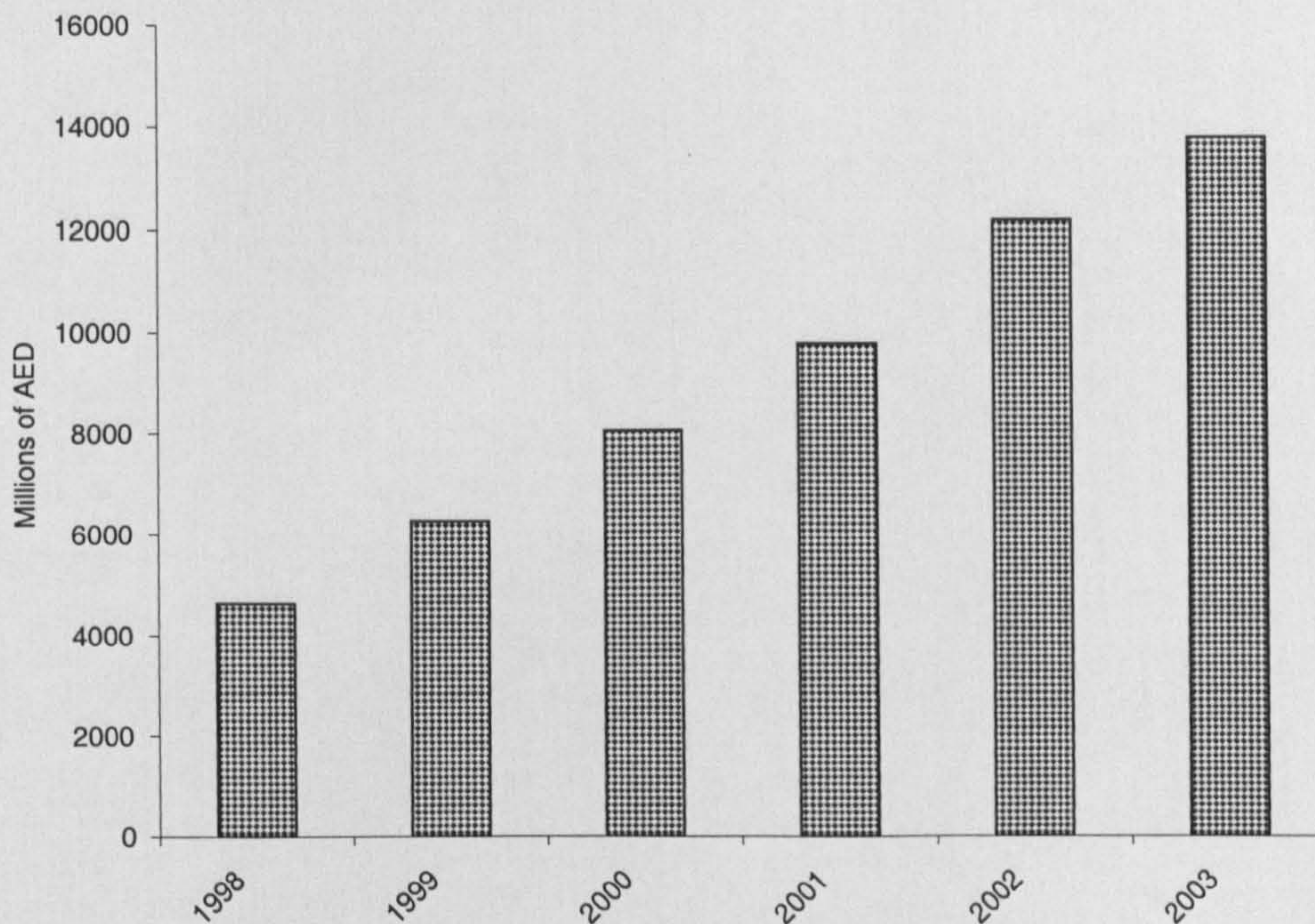


Source: Emirates Banks' Association Reports, *The financial position of commercial banks in the UAE, 2001, 2002, 2003.*

4.3.1 Dubai Islamic Bank

The DIB is a public joint stock company and was the first Islamic commercial bank in the world. It was established in Dubai in 1975 with authorized and paid capital amounting to 700 million AE Dirham and a nominal share price of 10 AE Dirham. However, during 2004, the board of directors announced their desire to increase the bank's capital to 1000 million AE Dirham, with the increment in share quantity to be given to existing shareholders only. The bank's large branch network consisted of 19 branches and 65 automatic teller machines (ATM) in 2003, and it is the only Islamic bank in the UAE that has separate ladies' branches, such as the Jumairah branch in Dubai and the Al Khalidyah branch in Abu Dhabi, where a full range of banking services is offered to women through the *Jawhrah* scheme.²⁵⁸

Figure 4.8 DIB: *Murabahah* Finance Performance



Source: Annual reports of Dubai Islamic Bank, 1999, 2000, 2001, 2002, 2003

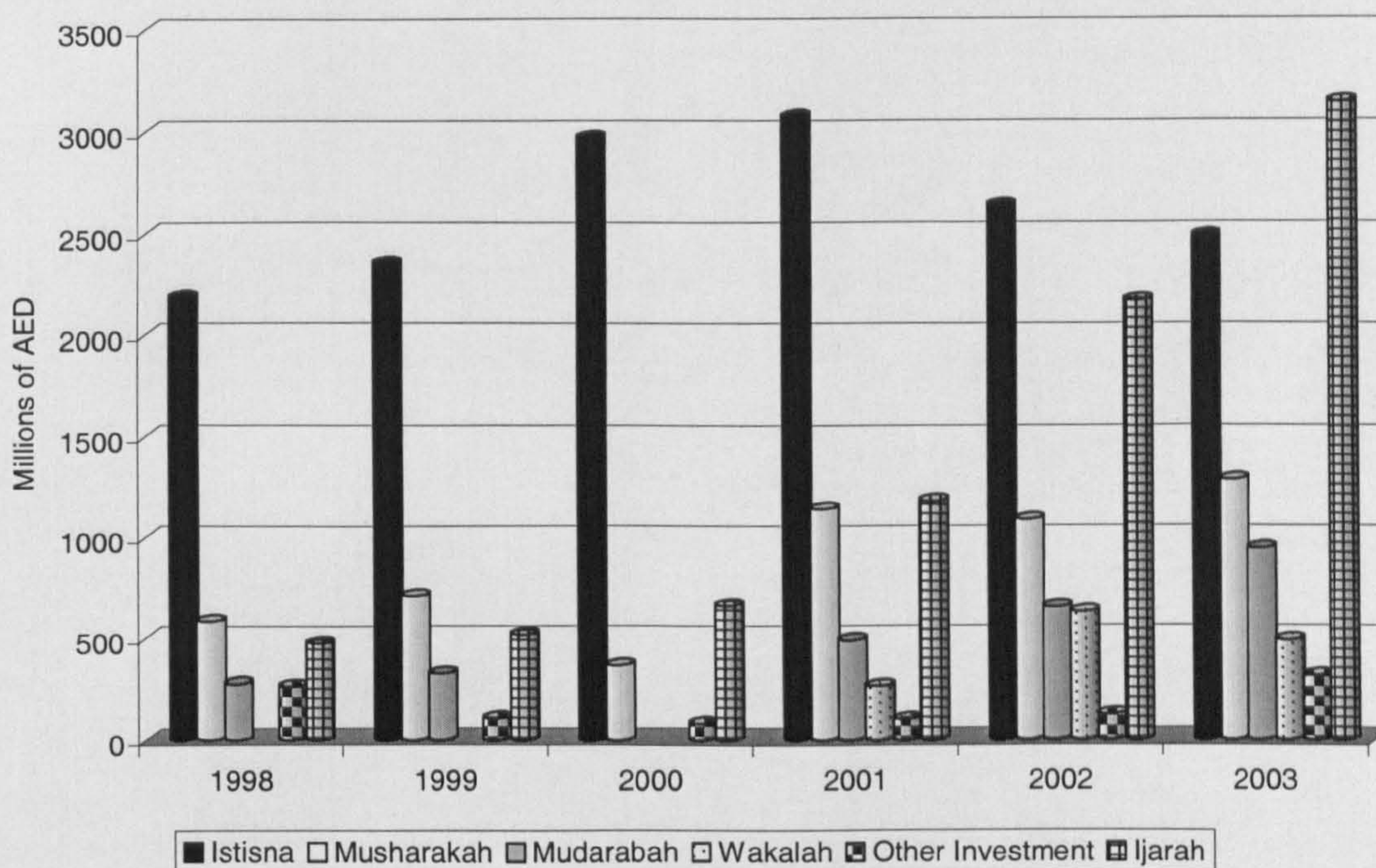
It is evident from Figure 4.8 that the DIB investment portfolio is dominated by *Murabaha*²⁵⁹ finance, which represented around 76 per cent of the total pool in

²⁵⁸ Annual reports of Dubai Islamic Bank, 1999, 2000, 2001, 2002, 2003.

²⁵⁹ *Murabahah* is a sale contract conducted to buy a commodity in which the price is either paid later in full or paid on an instalments basis against collaterals and in which the bank is required to take possession of the commodity before it can resell it to a prospective customer.

2003, and this result confirms the findings of other relevant studies. An examination of the DIB's performance over the past five years reveals that *Murabaha* finance has recorded continuous growth: between 1999 and 2003 it grew by 131 per cent, and by the end of 2003, the total *Murabaha* book had recorded 15,943 million AE Dirham.

Figure 4.9 DIB: Other Finance Performance



Source: Annual reports of Dubai Islamic Bank, 1999, 2000, 2001, 2002, 2003

Figure 4.9 sheds light on other investments, such as *Mudarabah*²⁶⁰ and *Musharakah*,²⁶¹ that are of less significance to the Dubai Islamic bank. The figure also indicates that the DIB management has directed a substantial amount of its investments towards *Murabaha*, *Istisna*²⁶², *Ijarah*²⁶³ and

²⁶⁰ *Mudarabah* is a trust contract where the bank is *Rab-al-mal*, *Rap El-mal* is the financier who will present the capital and the *Mudarib* is the qualified businessman, who is in need of capital. Usually the bank does not interfere in management operations but has the right to monitor and evaluate the financial performance of the project.

²⁶¹ *Musharakah* is a form of partnership or joint venture between the bank and the client which has the aim of achieving certain business goals or projects within an agreed period. The profit and loss incurred will be distributed on the basis of a sharing ratio that has already been agreed upon.

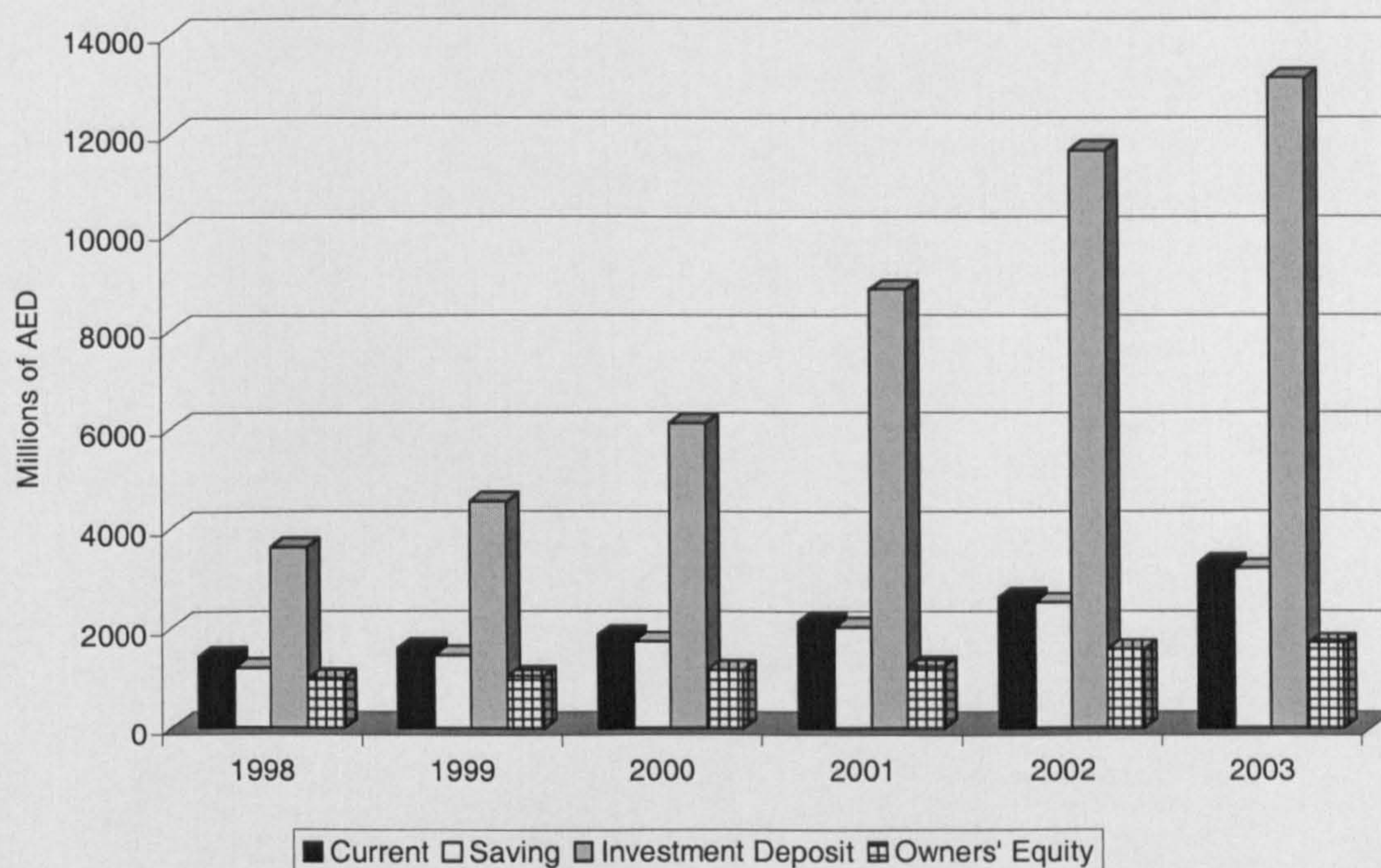
²⁶² *Istisna* is a form of *Murabaha* and the only difference between them is that the price in *Istisna* is paid in advance.

²⁶³ *Ijarah* is a hire-purchase agreement where the bank will buy the asset intended to be leased upon the request of its customer. *Ijarah-Wa-Iqtina* is a form of financial lease or Hire Purchase contract where the rent consists of three elements: cost, profit and an asset amortization portion. At the end of the contract, if the lessee expresses his desire to buy the asset, the rent that has been paid by him will be considered as part of the sale price.

*Wakalah*²⁶⁴, that are based on cost-plus or added mark-up finance, while it still seems reluctant to invest in *Mudarabah* and *Musharakah* financing.

Likewise, on the liabilities side, we can see from Figure 4.10 that the investment deposits have recorded substantial growth, increasing by 190.3 per cent between 1999 and 2003, with a book worth 13,134 million AE Dirham in 2003, compared with 4,524 million AE Dirham in 1999. Current and savings accounts also recorded a high rate of growth.

Figure 4.10 DIB: Other Liability Performance



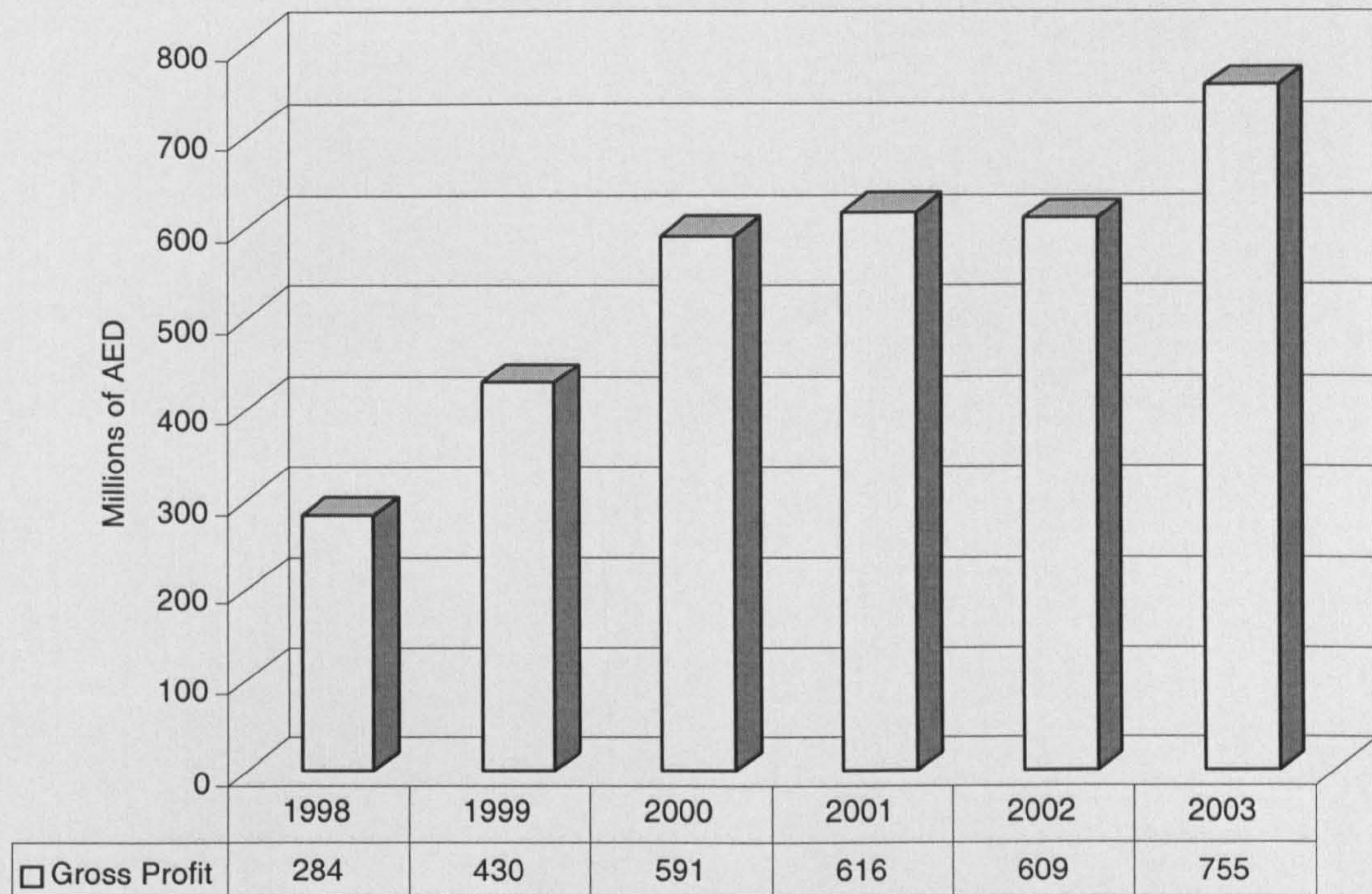
Source: Annual reports of Dubai Islamic Bank, 1999, 2000, 2001, 2002, 2003

Furthermore, Figure 4.10 also shows that the DIB has been achieving continuing success in mobilizing savings from customers, as all three types of account available at the bank have shown a steady upwards incline, and this may be a result of the trust that the bank has inspired in its customers and of the bank's sound performance. However, the DIB is facing difficulties in investing the regular increments in savings accounts in ways that are compatible with *Shari'ah* principles, while at the same time producing competitive returns for its customers.

²⁶⁴ *Wakalah* means that the customer may entrust the Islamic bank to act on his behalf, the bank in this case being called *Wakil* or agent, with some remuneration being claimable for playing this role.

On account of the steady growth that the DIB has achieved on both sides of its balance sheet, as mentioned above, the gross profit has also recorded a substantial growth: it was 755 million AE Dirham in 2003, which represents an increase of 75.6 per cent over 1999, as illustrated in Figure 4.11.

Figure 4.11 DIB: Net Profit Performance



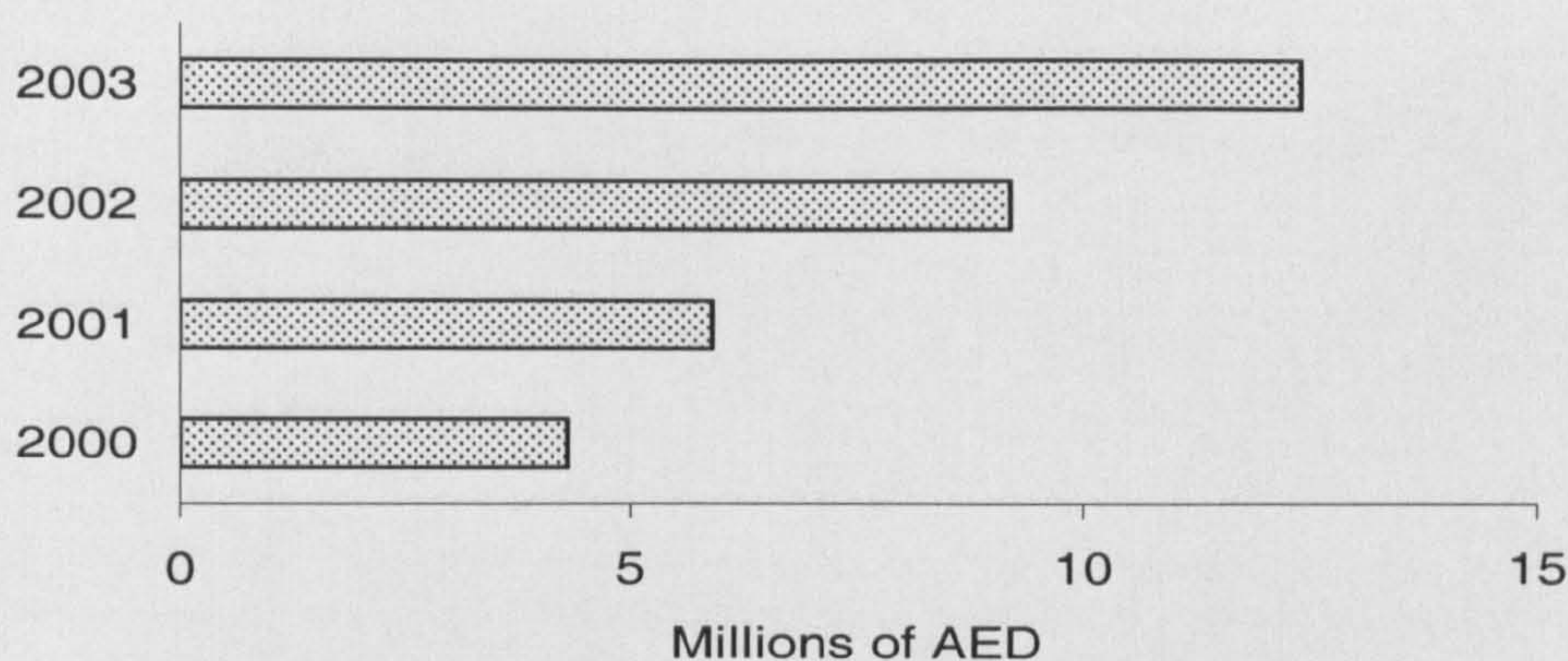
Source: Annual reports of Dubai Islamic Bank, 1999, 2000, 2001, 2002, 2003

On the other hand, support for social activities is also accomplished by the DIB management in the form of a well-organized distribution of the *Zakah*²⁶⁵ fund and interest-free loans, or *Qard-al-hassan*²⁶⁶. The DIB manages the *Zakah* fund, which it collects from many sources: for instance, from shareholders who have authorized the bank to pay their portion of *Zakah*, donations, and from the profits made from certain business transactions that the *Shari'ah* board has ruled did not conform to the principles of Islamic *Shari'ah*. Figure 4.12 shows the amount of *Zakah* fund managed by the bank.

²⁶⁵ *Zakah* is an Islamic tax.

²⁶⁶ *Qard-al-hassan* is an interest-free loan.

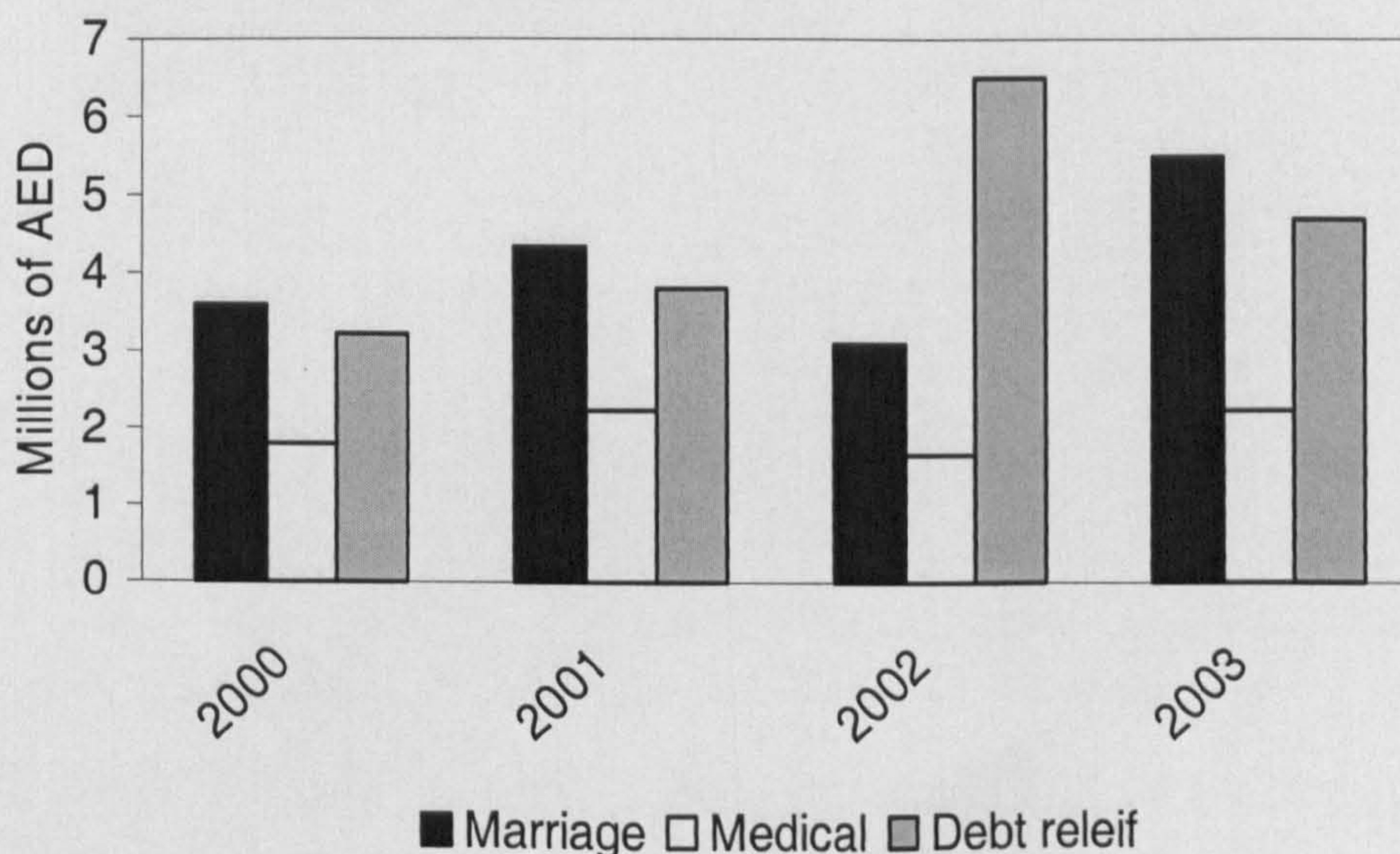
Figure 4.12 DIB: Zakah fund



Source: Annual reports of Dubai Islamic Bank, 1999, 2000,2001,2002, 2003

In addition, the DIB's *Shari'ah* board members manage *Qard-al-hassan*, or interest-free loans designed to serve particular social purposes that benefit both customers and employees of the bank. Figure 4.13 illustrates the purposes of interest-free loans.

Figure 4.13 DIB: *Qard-al-hassan*



Source: Annual reports of Dubai Islamic Bank, 1999, 2000,2001,2002, 2003

The historical analysis of DIB assets and liability book value shows that the DIB was able to achieve substantial growth in its total investment pool, total assets, customers' deposits, total liabilities and shareholders' funds. Table 4.4 illustrates the growth in those categories.

Table 4.4 Expansion of the DIB's Assets & Liabilities (Millions of AED)

Year/ Item	Total Investments	Total Assets	Customers' Deposits	Total Liabilities	Total shareholders' funds	Net Profit Income
1998	6642	7825	6312	6822	1003	28
1999	8449.4	9352	7627	8302	1050	101
2000	10536	11773	9773	10684	1090	119
2001	13556	15334	13122	14197	1137	152.5
2002	17877.5	19598	16986	18124	1474	160
2003	14072	22778	19883	21230	1548	234

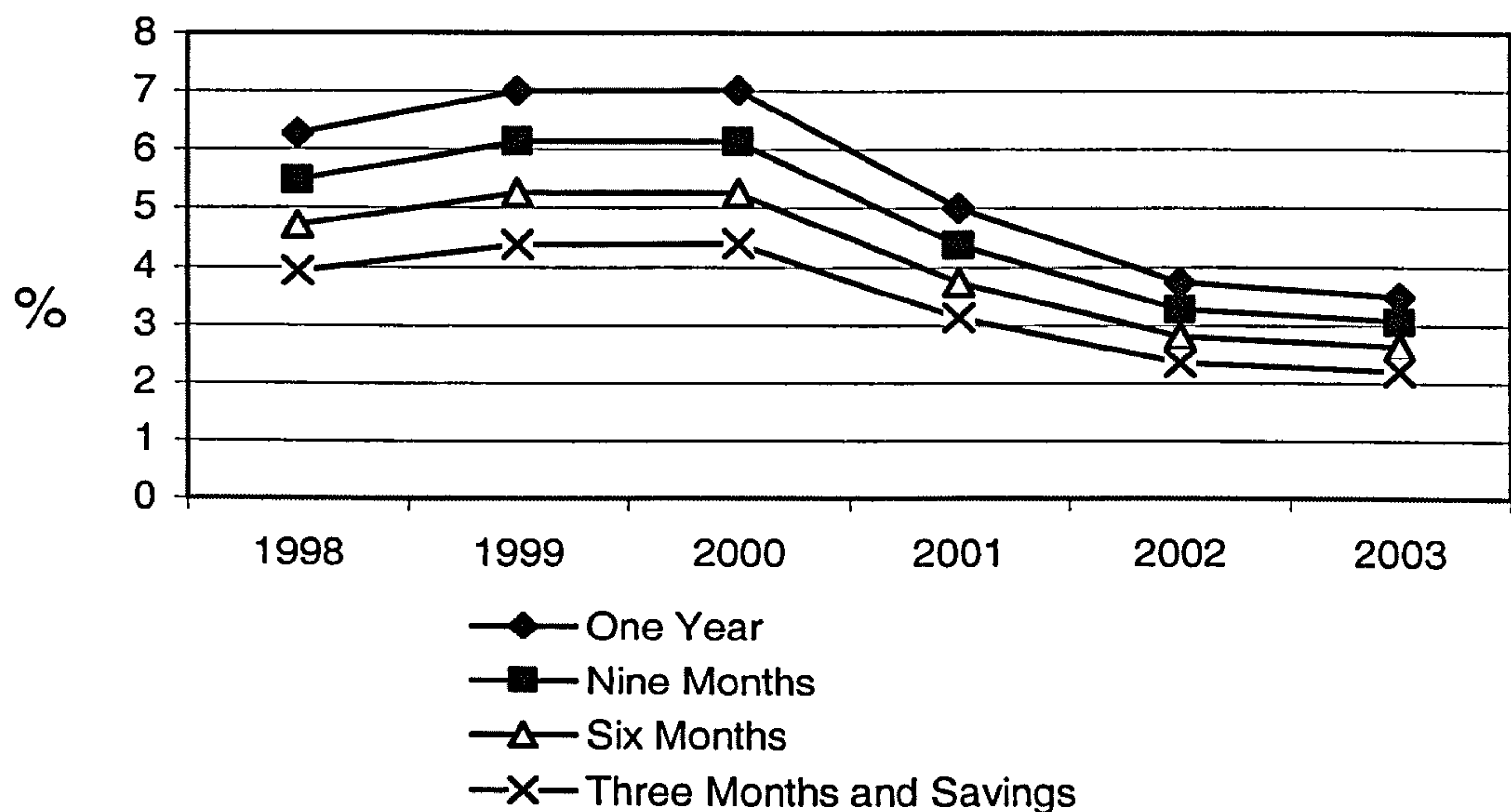
Source: Emirates Banks' Association Reports, *The financial position of commercial banks in the UAE*, 1999, 2000, 2001, 2002, 2003.

In spite of the impressive growth that has been achieved by the bank in both assets and liabilities, the profits distributed to the investment account holders have gradually decreased. There are many reasons for this decrease in the return on customer savings while the bank has been achieving a steady growth in net profit. One of these reasons is the bank's change in business strategy to one based on establishing a real partnership with conventional banks in the market. All the members of the DIB board of directors were replaced following the uncovering of a case of embezzlement during 1997, with the result that representatives of the government of Dubai now predominate on the bank's board of directors, and the government owns more than 30 per cent of the total capital shares. One of the recent changes made by the bank's new board of directors has been in the strategy related to the deposits profit rate distributed to the deposits owners, with the board deciding to establish a unique reserve which they have called the Profit Equalization Reserve. The PER is a portion of the depositors' share of profits set aside as a reserve payable to the depositors upon the approval of the board of directors and the *Shari'ah* board. Obviously, this reserve has been created not only as a means of securing the bank's assets against market price impairment, but also as a way of reducing the depositors' share of the profits to bring it closer to the interest rate distributed by conventional banks to time deposits owners. It is true that in making this decision, the board of directors have taken into consideration their relationship

with their partners in the market. However, they have unfortunately at the same time disregarded their depositors' rights to receive their full share of the profits earned according to *Shari'ah* principles; also, in the absence of a well-defined mechanism in the bank's accounting system, if in years to come the customer wishes to withdraw his savings from the bank, he will be unable to take back his portion of the profit that was transferred to the profit equalization reserve.

Secondly, the competitive situation in the market has also been a deciding factor in the decrease in returns on customers' investments. Banks in the UAE have been influenced affected by the decrease in the interest rate internationally, and the central bank decreased the inter-bank interest rate, thus resulting in a concomitant decrease in the interest paid on savings. Figure 4.14 shows the development in profit distributed to investment account holders at the Dubai Islamic bank.

Figure 4.14 DIB profit distribution on investment accounts



Source: Annual reports of Dubai Islamic Bank, 1999, 2000, 2001, 2002, 2003

Overall, the DIB is the largest Islamic bank in the UAE: its total assets were recorded as being 22,778 million AE Dirham at the end of 2003. The bank has spread its operations globally by taking over the management of numerous real-estate funds and constructions projects in many countries, such as France, the US and Sudan. However, the major development has occurred through the

bank's participation in financing Dubai Government projects; recently the DIB has participated heavily in financing real-estate projects, such as Nakheel and the new terminal of Dubai International Airport. During October 2004, the DIB announced the biggest Islamic *Sukuk* issuing, where it opted to be nominated as a mandated lead manager of an *Ijarah Sukuk* issuing operation worth US\$ 750 million, alongside HSBC and Citigroup. The *Ijarah Sukuk* were fully underwritten by six banks – DIB, HSBC, Gulf International Bank, Kuwait Finance House, Citigroup and Standard Chartered Bank – and will mature within five years, with the return defined as LIBOR plus 0.25, while the *Sukuk* will be listed in the Dubai Financial Market and Luxembourg .

The Nakheel project is an example of *Ijarah* finance designed to provide adequate funds to the major part of the Dubai Emirate real estate renaissance. The DIB manages this deal in an arrangement with three major international banks in the region (HSBC, Citigroup and Standard Chartered bank), the deal being worth US\$ 350 million. In addition, the DIB was the lead arranger for the US\$ 530 million *Ijarah* finance portion for the Qatar gas phase 2 projects, worth about US\$ 12 billion in total, which is the capital for the joint venture Liquid Natural Gas (LNG) project, under which Qatar Petroleum will supply the United Kingdom-based Exxon Mobil Corporation with natural gas.²⁶⁷

4.3.2 Abu Dhabi Islamic Bank

The ADIB is a public joint stock company which was incorporated in Abu Dhabi in 1997 as an Islamic banking institution. Its paid capital is distributed to equal shares, each share having a nominal value of 10 AE Dirham. The ADIB also has a substantial branch network, with 14 branches operating in the major cities of the UAE in 2004.²⁶⁸

The ADIB's vision and strategy concentrate on providing state-of-the-art Islamic banking by deploying the available technology and banking experience in this field. Despite this, however, the ADIB has been having serious managerial

²⁶⁷ AME Info online news, 20/10/2004, available from: <http://www.ameinfo.com/news /Detailed/51679.html>, [Accessed on 19 October 2005].

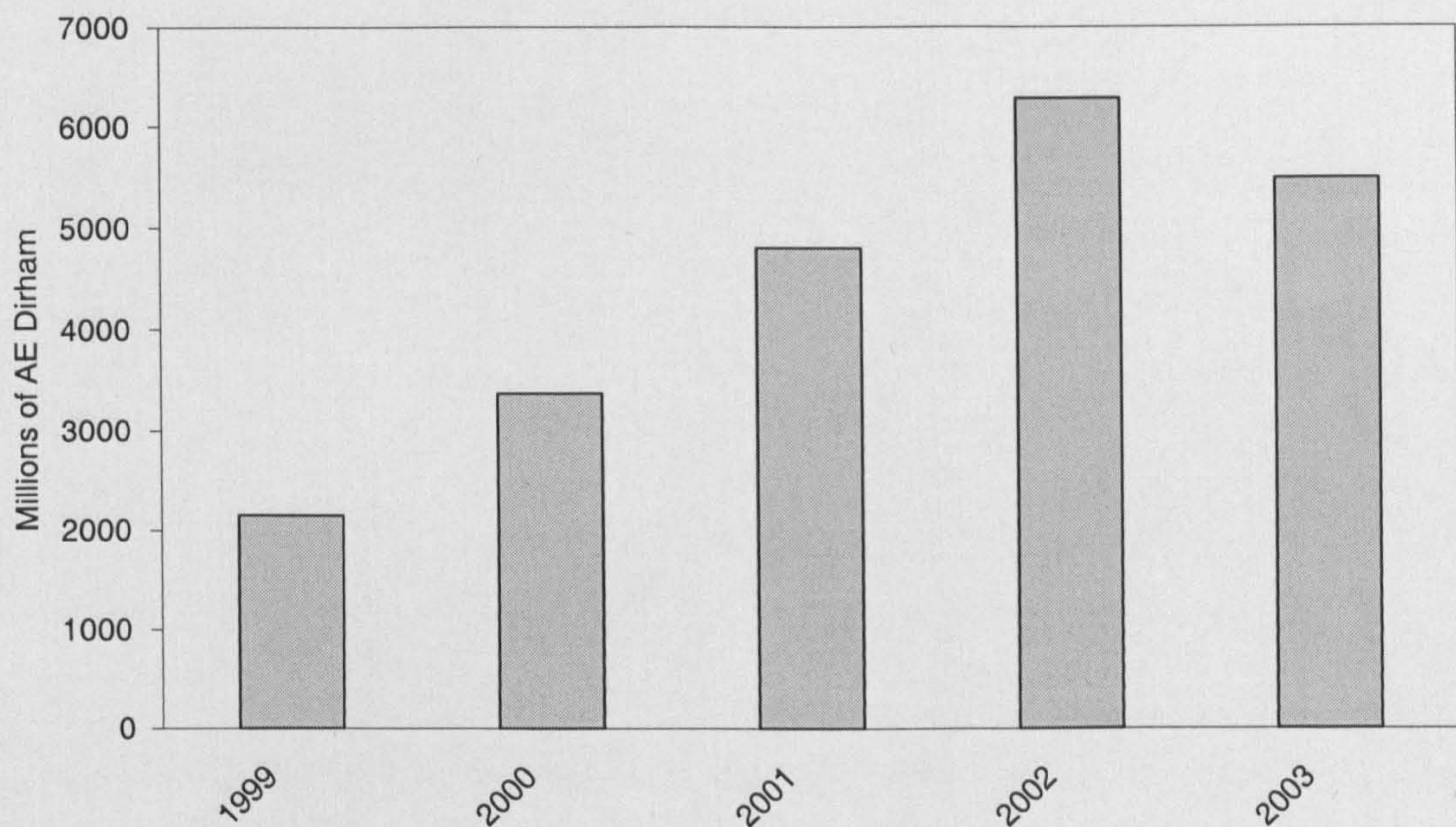
²⁶⁸ Annual reports of Abu Dhabi Islamic Bank, 1999, 2000,2001,2002, 2003.



problems that have resulted in the resignation of a number of senior managers, although the bank's performance over the last few years has recorded considerable growth.

As may be seen from Figure 4.15, *Murabaha* financing recorded a steady growth between 1999 and 2002, but declined during 2003 by 13 per cent; its growth from 1999 until 2003, however, was impressive, at 233 per cent. It appears that the management of the ADIB have succeeded in attracting dissatisfied customers from the Dubai Islamic Bank, and in sharing with the DIB the potential demand for Islamic banking products in the UAE market. Their business strategy is based on a combination of astute marketing plans and the implementation of state-of-the-art technology-based banking.

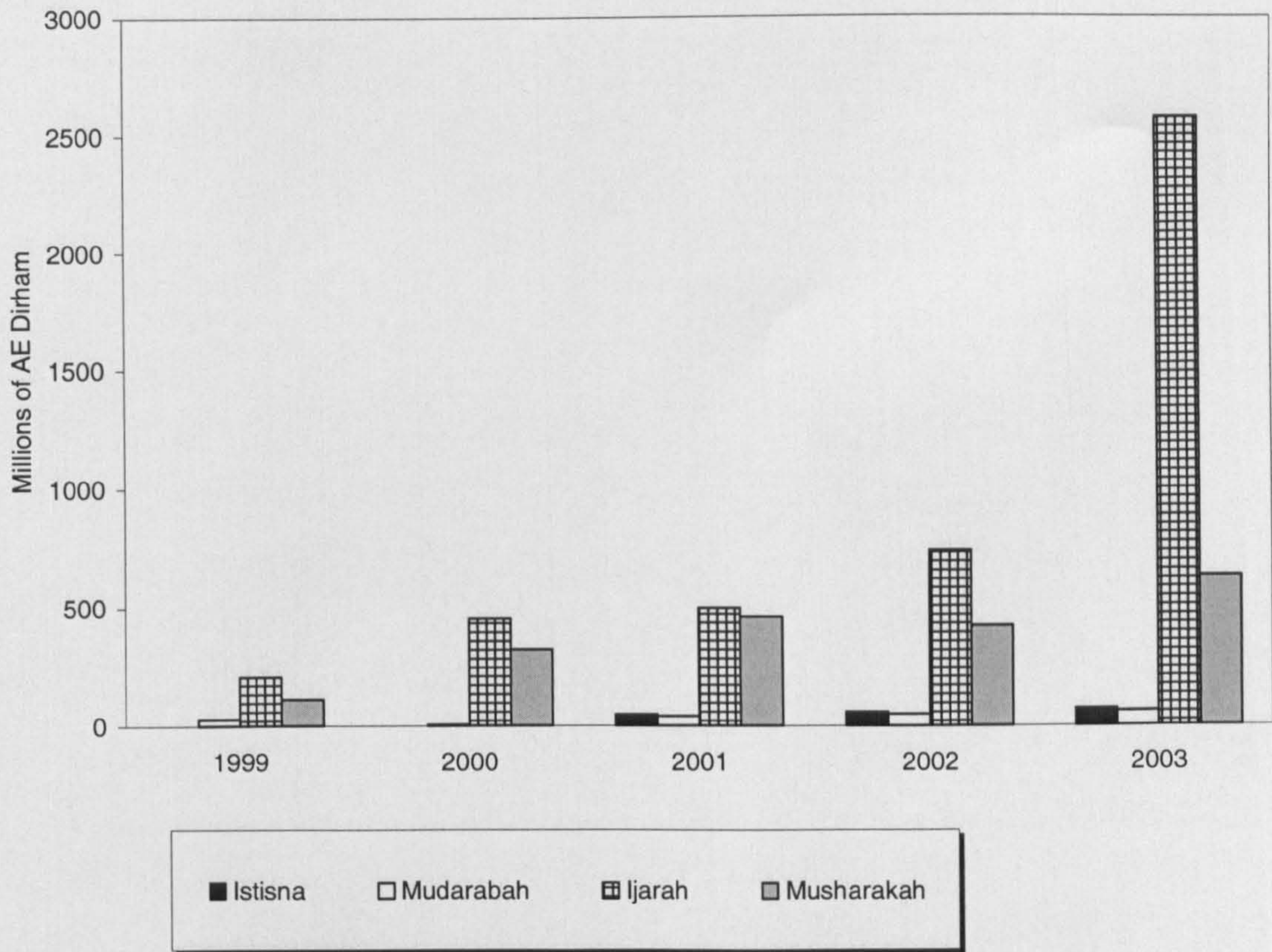
Figure 4.15 ADIB: *Murabahah* Financing Performance



Source: Annual reports of Abu Dhabi Islamic Bank, 1999, 2000, 2001, 2002, 2003.

Recently, the *Ijarah* product has also attracted the attention of Islamic banks in the region. For this reason, the ADIB's statements have revealed an impressive growth in *Ijarah*, which recorded a total of 2,570 million AE Dirham in 2003, compared with 206 million AE Dirham in 1999. Other financing methods remain below 1000 million AE Dirham. Figure 4.16 sheds some light on the ADIB's performance in terms of other financing methods since 1999.

Figure 4.16 ADIB: Other Financial Instruments Performance



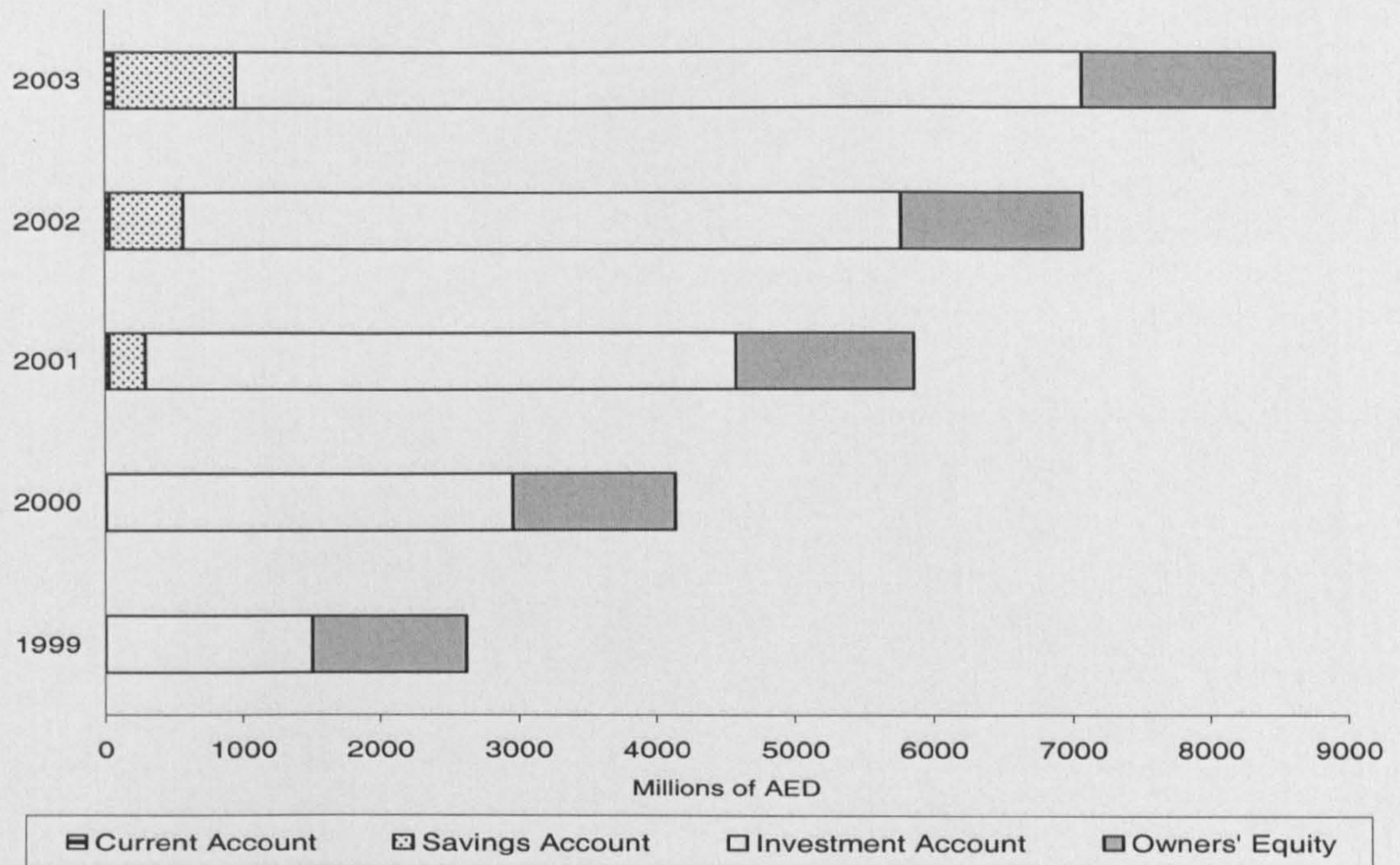
Source: Annual reports of Abu Dhabi Islamic Bank, 1999, 2000, 2001, 2002, 2003.

Figure 4.17 shows that the ADIB has also managed to mobilize savings from customers in the form of time deposits, which are considered to be the backbone of any Islamic bank's resources. Figure 4.17 also shows that customers' deposits have increased by 13 per cent since 2001 and were worth 6,123.5 million AE Dirham in 2003.

By the end of 2003, the ADIB was able to achieve a net operation income of 147 million AE Dirham as an increment, which represents a three-fold increase over 1999. This increment reflects the impressive growth in both *Murabahah* finance and customers' deposits.

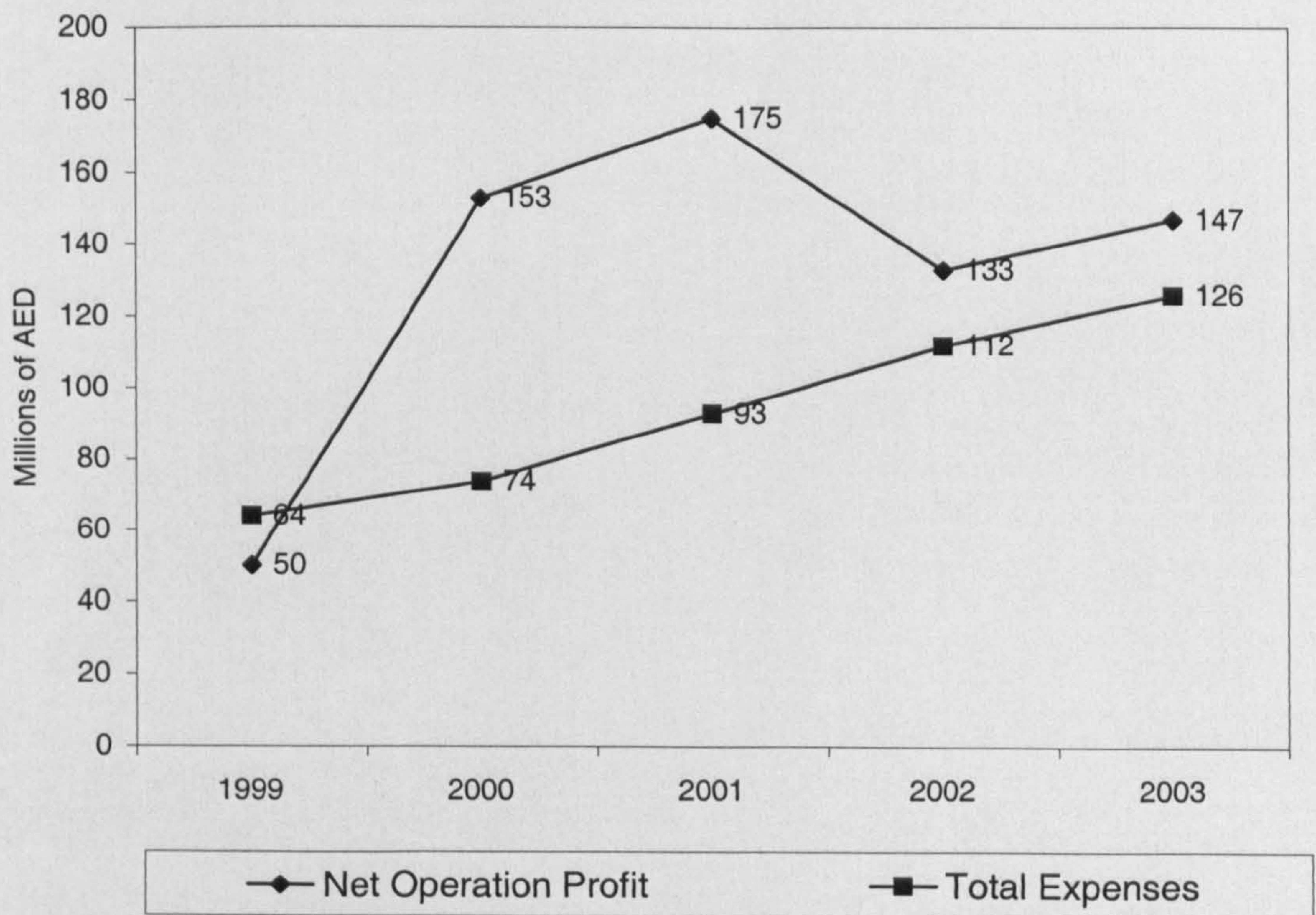
Figure 4.18 illustrates the growth trend of net operation profits and total expenses, clearly showing that the ADIB started with high overhead expenses after the launching of its services in 1997, and from 2001 began to make a profit.

Figure 4.17 ADIB: Liabilities Performance



Source: Annual reports of Abu Dhabi Islamic Bank, 1999, 2000, 2001, 2002, 2003.

Figure 4.18 ADIB: Net Profit / Total Expenses Performance



Source: Annual reports of Abu Dhabi Islamic Bank, 1999, 2000, 2001, 2002, 2003.

Overall, in a very few years, the ADIB has achieved an impressive growth since it was established in 1997. Table 4.5 shows assets and liabilities figures from

1998 until 2003, indicating that the bank's investments and total assets increased by 54.5 and 6.3 times respectively over six years.

Table 4.5 Development of ADIB's Financial Statement
(Millions of AED)

Variables/Years	1998	1999	2000	2001	2002	2003
Total Investments	122.4	383.3	1200.2	2670	3710.4	6669.3
Total Assets	1458	2664.2	4363.5	6113.1	7937.3	9221
Customers' Deposits	337.2	1499	2954.2	4287	5201	6123.5
Total Liabilities	354.25	1543.1	3183.3	4882.4	6684.3	7890.3
Total shareholders'	1103.6	1121.1	1180.2	1230.7	1253	1330.4
Net Profit Income	33.4	18.35	60	80.5	75.6	101

Source: Emirates Banks' Association Reports, *The financial position of commercial banks in the UAE*, 1999, 2000, 2001, 2002, 2003.

4.3.3 Sharjah Islamic Bank

The Sharjah Islamic Bank (SIB) was incorporated in Sharjah in 1975 as a conventional bank. The bank's board of directors decided to convert it into a fully-fledged Islamic bank during 2001. Also in the same year the authorized bank's capital was raised: in addition to 200 million AED in the form of ordinary shares at a nominal price of 2.5 AED, another 13,993,086 ordinary shares paid in full by the Kuwait Finance House (KFS) was issued, the government of Sharjah still owning 27 per cent of total paid up capital while the new share holders (KFH) owned 20 per cent.²⁶⁹ It is worth mentioning that Government of Sharjah loans, in addition to other local government firms loans, were restructured and classified in the balance sheet as leased Assets: in the 2001 annual report the total amount of government loans was 1494.1 million AED, while in 2002 the balance was 3.1 million AED, and the new assets category booked at 1223.75 million AED.²⁷⁰

The SIB is a small-range bank, which maintains a satisfactory financial performance that reflects the strategy of its management and the volume of its capital, that amounts to 386 million AE Dirham. The bank's business vision is

²⁶⁹ Annual reports of Sharjah Islamic Bank, 2001, p. 33.

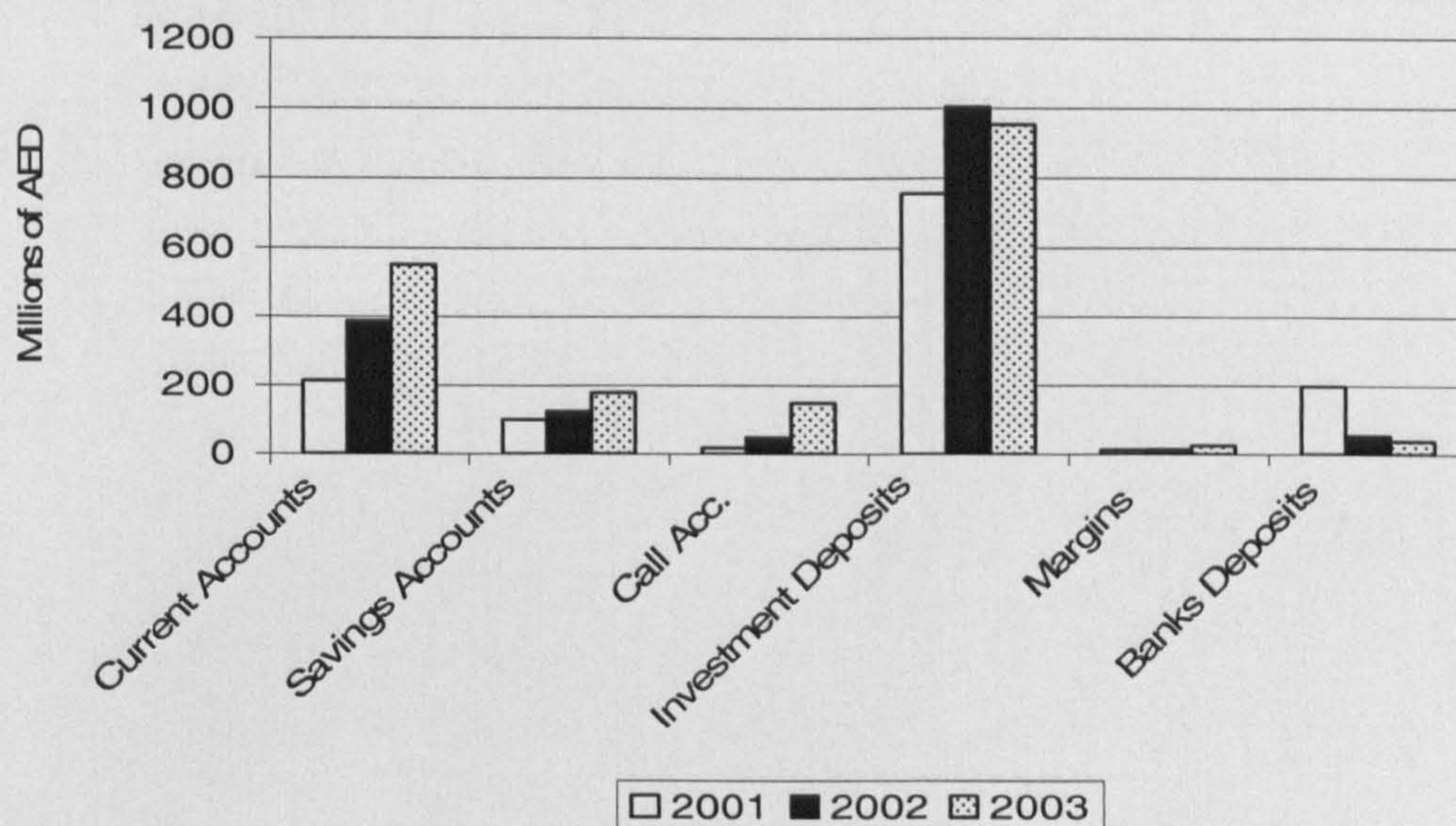
²⁷⁰ Ibid., p. 33.

directed mainly towards providing Islamic finance to retail customers as a priority, through a small network of branches and automatic teller machines (ATM). There are nine branches in major UAE cities, in addition to an adequate number of ATM concentrated mainly in Sharjah city.²⁷¹

The SIB offers a wide range of Islamic banking services, including current accounts, savings accounts, and time deposits. In addition, the bank offers many choices of financing, ranging from traditional Islamic financial products, such as *Murabaha*, *Ijarah* and *Istisna*, to innovative products such as medical, education and travel financing schemes.

Figure 4.19 reveals that the SIB has been able to achieve a steady growth in savings accounts, investment deposits and current or call accounts. In particular, investment deposits certificates increased by 41 per cent between 1999 and 2003.

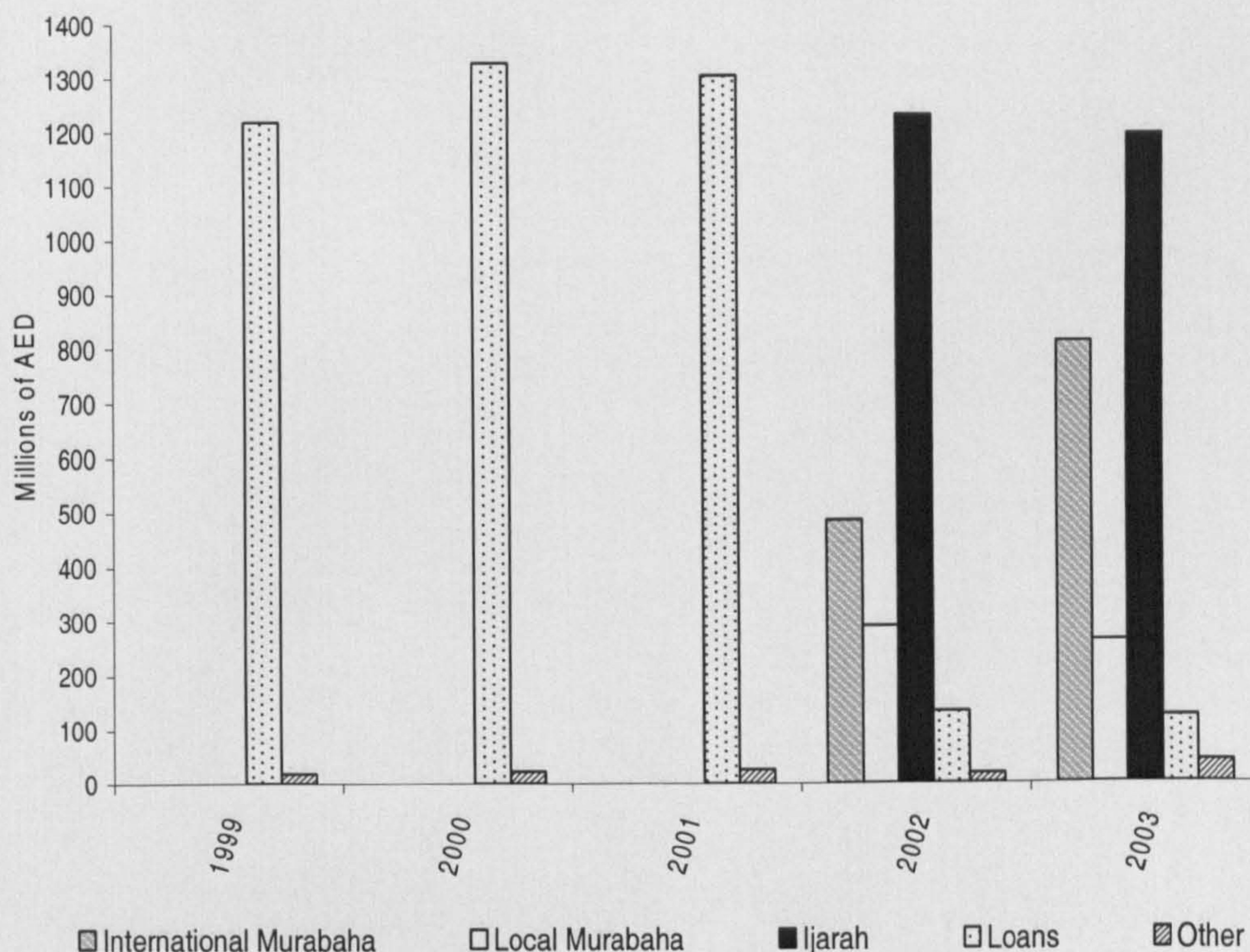
Figure 4.19 SIB: Liabilities Performance



Source: Annual reports of Sharjah Islamic Bank, 1999, 2000, 2001, 2002, 2003

²⁷¹ Annual reports of Sharjah Islamic Bank, 1999, 2000, 2001, 2002, 2003.

Figure 4.20 SIB: Financial Performance



Source: Annual reports of Sharjah Islamic Bank, 1999, 2000, 2001, 2002, 2003

The bank was able to record better growth in *Murabahah* and *Ijarah*, which replaced the conventional loans, their books being worth 1272 million AE Dirham at the end of 2003, as illustrated in Figure 4.20. However, interest-based loans that had been initiated before the conversion to Islamic banking declined sharply - by 100 per cent - in 2003, being worth 1219 million AE Dirham in 1999 and 122 million AE Dirham in 2003.

Eventually, the restructuring of the bank's assets to comply with Islamic *Shari'ah* has resulted in a decline in the amount of interest-based loans, which represented 87.5 per cent of the SIB's total assets in 1999. While the SIB suffered a drop in its net profit by 32 per cent between 1999 and 2003, the bank was able to achieve a growth in 2003 due to an increase in the retained earnings and the investment deposits that were being deployed, such as *Murabaha* and *Ijarah*. Figure 4.21 illustrates the growth in the net profit of the SIB from 1999 until 2003.

Figure 4.21 SIB: Net Profit Growth



Source: Annual reports of Sharjah Islamic Bank, 1999, 2000, 2001, 2002, 2003

4.4 Conclusion

As the previous discussion indicates Islamic banks in the UAE usually depend on short-term financing such as *Murabaha* and *Ijarah*, and this result is in line with the findings of relevant studies. Islamic banks are avoiding *Mudarabah* and *Musharakah* financing for many reasons, namely: an absence of transparency, in the form of, for instance, trustworthy financial reports relating to all business activities; an absence of industry indexes for all kinds of business which is making the visibility studies of potential projects useless and inaccurate; a lack of business trust, and finally, the lack of a legal framework.

The above historical analysis of the financial performance of the banking system in the UAE reveals that the system possesses a high degree of creditability and financial stability. This conclusion confirms International Monetary Fund reports on the financial system of the United Arab Emirates.²⁷² In general, IMF reports show that the UAE banking system demonstrates a

²⁷² The International Monetary Fund, *Financial system stability assessment of the United Arab Emirates*, Available from: <http://www.uaecb.gov.ae>, [Accessed on 10 June 2005].

strong performance in assets, deposits, lending growth, assets diversification, capitalization, profitability and efficiency, and has a fairly diversified portfolio. In particular, the IMF report identified many themes and strengths of the UAE financial system which are as follows:

1. The banking system in the United Arab Emirates is supported by the government against any systemic shock. An example of this was the Dubai Islamic bank's liquidity problem during 1997, that resulted from a massive cash withdrawal which took place immediately after the media announcement that the bank's funds were being embezzled by its chief executive officer.
2. The banking system in the UAE is characterized by strong fundamentals, profitability and improved credit quality and products.
3. The banking system in the UAE is less exposed to interest rate risk and serious liquidity crisis, hence banks have enough liquidity, and the majority of the banks' assets are short-term and well matched to their liabilities. In addition, all banks maintain short-term deposits in foreign banks to deal with a crisis.
4. The banking system in the UAE is less exposed to credit risk, and all banks have equipped themselves with bad loans provision to deal with such a risk.
5. The banking system in the UAE is less exposed to foreign exchange risk as the banks deal with a limited number of currencies and few derivatives; also the Dirham is pegged to the US Dollar.

The next chapter will carry out a financial analysis projection regarding the Islamic banks' performance in the United Arab Emirates. For this purpose, horizontal and vertical analyses of the financial statements of the Islamic banks will be conducted.

Chapter Five

Financial Analysis of the UAE Islamic Banks

5.1 Introduction

The UAE banking system does not differentiate between Islamic banks and conventional banks, in that all banking institutions are subject to the same monitoring criteria. At the same time, the bank's financial performance is a priority concern of management, as well as of the bank's stakeholders, who are more concerned about the efficiency of the bank's operations.

In this regard, the absence of globally accepted standard percentages for the banks' performance ratios and the unavailability of industry averages for banking service business in the UAE (since these averages are crucial in order to identify abnormal aspects of the banks' performance²⁷³) mean that our financial analysis must be limited to horizontal and vertical analyses of balance sheets and profit and loss accounts, and to trend analysis using some performance ratios.

This chapter will therefore present a financial analysis using ratios shown in the UAE Islamic banks' financial statements relating to the years 2000 to 2004, in which principally line-by-line comparison analysis and vertical analysis will be used. To conclude the chapter, strengths, weaknesses, opportunities and threats will be discussed and a number of recommendations will be made.

5.2 Financial Analysis

Financial analysis decodes the messages pertinent to the financial performance of a company and sheds light upon areas in the company that deserve special attention.²⁷⁴ It may be conducted using one or more of three methods: the first of these involves a time-series comparison, which means to compare the

²⁷³ Rees, Bill, *Financial analysis*, Second Edition, Prentice Hall, 1995, p.86.

²⁷⁴ Walton, Peter, *Financial statement analysis: An international perspective*, Thomson Learning, 2000, p.159.

figures for the current year with those for the preceding year;²⁷⁵ this is also sometimes called a horizontal or line-by-line comparison.²⁷⁶ The second method is through a cross-sectional analysis,²⁷⁷ which involves making a comparison with competitors for the same year²⁷⁸. The third method is that of vertical analysis: by this method, the figures on the balance sheet and the profit and loss statement are represented as percentages of the total of the figures in one column.²⁷⁹

Many factors influence the successful use of liability management techniques: for instance, capital adequacy, past and expected profitability, size of the bank, growth rate of deposits and assets, history of loan losses, and finally, the reputation of the bank and its management.²⁸⁰ Although the lack of accounts uniformity, diversification and globalization as a result of merger and acquisition, and the lack of a conceptual foundation may invalidate the ratios analysis,²⁸¹ it is still considered useful in overcoming differences in size among business firms²⁸². According to Wood and Porter, five sets of ratios can reflect the strength or the weakness of the financial position of any bank: these are the liquidity, profitability, efficiency, deployment and capital adequacy ratios.²⁸³

5.3 Growth Analysis

The growth in the balance sheet of the DIB is presented in Table 5.1, which indicates impressive growth on both sides of the balance sheet. In particular, bank assets such as investments recorded a handsome growth of 116.14 per cent, and the cash available at the bank increased by 48.22 per cent, while fixed assets grew by a remarkable 163.5 per cent. The impressive growth achieved by the bank is a result of the enormous domestic projects that the DIB

²⁷⁵ Walton, Peter, *Financial statement analysis: An international perspective*, Thomson Learning, 2000, p.154.

²⁷⁶ Pendlebury, Maurice and Roger Groves, *Company accounts: Analysis, interpretation and understanding*, Fifth Edition, Thomson Learning, 2001, p.105.

²⁷⁷ Rees, Bill, *Financial analysis*, Second Edition, Prentice Hall, p.88, 1995.

²⁷⁸ Walton, Peter, op. cit., p.154.

²⁷⁹ Pendlebury, Maurice and Roger Groves, op. cit., p.105.

²⁸⁰ Wood, Oliver G. and Robert J. Porter, *Analysis of bank financial statements*, Van Nostrand Reinhold, New York, 1979, p.45.

²⁸¹ Ibid., pp. 108-109.

²⁸² Walton, Peter, op. cit., p.155.

²⁸³ Metwally, M.M., "Differences between the financial characteristics of interest-free banks and conventional banks", *European Business Review*, Volume 97, No. 2, 1997, pp. 92-98.

has financed, such as the real estate projects in Dubai emirate, examples of which are Nakheel and Dubai International airport, as mentioned in the previous chapter, while the increment in fixed assets resulted from the large number of new branches opened during this period (in 2001 the number of branches was (13); by the end of 2004 this number had risen to (21)).²⁸⁴ In addition, the growth in assets items has been financed by a substantial growth in customers' deposits of around 89.1 per cent, and a growth in owner's equity of 141.5 per cent.

Table 5.1 Horizontal analysis of the DIB balance sheet (millions of AED)

Particulars	2001	2002	2003	2004	Growth %
Cash	1547	1299	1385	2293	48.22
Investments	12291	15660	18609	26565.78	116.14
Fixed Assets	48	119.3	117.4	126.46	163.5
Customers' Deposits	13123	16897	19757.5	24814.91	89.1
Total Liability	14100	18017	21156.6	27626.75	95.93
Owner's Equity	1237	1583	1702.4	2986.8	141.5
Off Balance Sheet	2569	1639	1561	2785.3	8.42

On the other hand, the horizontal analysis of the profit and loss account (P&L) of the DIB, presented in Table 5.2, shows that net income increased by 202.31 per cent from 2001, this substantial growth being generated mainly from the growth in profits yielded from investments which increased by 79.3 per cent, and from fees and commission, since the new management's strategy is to charge for all the services the bank provides its customers. The amount of fees generated thus became three times bigger between 2001 and 2004. In addition, the proportion of profits distributed to customers was gradually decreased, distribution from total operation income to customers being 75.24, 73.40, 68.77, and 54.70 per cent for 2001, 2002, 2003 and 2004 respectively.

²⁸⁴ Dubai Islamic Bank Annual reports, 2002, 2003, 2004.

Table 5.2 Horizontal analysis of DIB P&L (millions of AED)

Particulars	2001	2002	2003	2004	Growth %
Income on Investment Activities	753	821	925	1350.04	79.3
Total Income	834	882	1025	1470.02	76.3
Administration Expenses	182	220	286	335.62	84.41
Depreciations & Provisions	36	53	73	116.6	223.9
Total Expenses	218	272.4	270	452.22	107.44
Operating Income	615.84	600.93	750.664	1017.8	65.3
Distribution to Depositors	463.34	441.13	516.204	556.763	20.2
Net Income	152.5	159.8	234.46	461.03	202.31

The horizontal analysis of the ADIB balance sheet between 2001 and 2004 (Table 5.3) shows that substantial growth was achieved on both sides of the bank's balance sheet. In particular, cash availability increased by 154 per cent during this period and investments increased by around 106 per cent, while fixed assets increased by 53 per cent. The growth in the bank's available cash may be related to the increase in reserves, as a result of a 123.3 per cent increase in customers' deposits, while the increase in fixed assets may be related to the number of new branches which were opened during this period.

Table 5.3 Horizontal analysis of the ADIB balance sheet (millions of AED)

Particulars	2001	2002	2003	2004	Growth %
Cash	241	353	485	611.13	154
Investments	5842.4	7522	8658.4	12023.6	106
Fixed Assets	29	29	35	44.27	53
Customers' Deposits	4286	5200	6124	9568.84	123.3
Total Liability	4749	6501	7820	11181.53	135.45
Owner's Equity	1280	1304	1401	1505.64	18
Off Balance Sheet	1807	3049	3801	4177.29	131.2

Table 5.4 illustrates the growth in the ADIB's profit and loss account between 2001 and 2004. It can be seen that net income growth touched 53 per cent, the result of an increase in operating income of 52.5 per cent, after deducting the distribution to depositors, which also grew by 52.21 per cent.

Table 5.4 Horizontal analysis of the ADIB's P&L (millions of AED)

Particulars	2001	2002	2003	2004	Growth %
Income on Investment Activities	268	251	272	490.55	83
Total Income	268	251	272	490.55	83
Administration Expenses	79.1	90.65	110.8	145.92	84.5
Depreciations & Provisions	13.73	21	14.96	77.81	467
Total Expenses	92.83	111.65	125.7	223.73	141
Operating Income	175	138.9	146.6	266.81	52.5
Distribution to Depositors	94.54	63.24	46.06	143.903	52.21
Net Income	80.5	75.63	100.6	122.91	53

SIB recently became a fully-fledged Islamic bank, changing its name from the National Bank of Sharjah to Sharjah Islamic Bank. Table 5.5 shows the growth in the bank's assets and liabilities from the year it became an Islamic bank until 2004. The bank's available cash, for example, decreased sharply - by 42 per cent. The reason for this may be that a well-managed liquidity policy was set up after the compulsory liquidation of some interest-based investments in 2001 in order to comply with Islamic *Shari'ah*.

Table 5.5 Horizontal analysis of SIB balance sheet (millions of AED)

Particulars	2001	2002	2003	2004	Growth %
Cash	660	184.5	180	384.80	-42
Investments	1478	2133	2405.6	3003.93	103.24
Fixed Assets	37	37	34.4	34.03	-8
Customers' Deposits	1104	1583	1858.8	2481.50	125
Total Liability	1356	1711	1965.3	2751.12	103
Owner's Equity	745.7	666.7	676.5	703.46	-6
Off Balance Sheet	345	420.5	273	580.33	68.2

Also, the bank reported a decline in owner's equity of 6 per cent, the result of a decline of 6.53 per cent in net income for the same period. However, the bank achieved an impressive growth in investments - of 103.23 per cent - and in customers' deposits (125 per cent). Table 5.6 shows the developments in the profit and loss account of SIB.

Table 5.6 Horizontal analysis of SIB P&L (millions of AED)

Particulars	2001	2002	2003	2004	Growth %
Income on Investment Activities	111	121	104.58	115.02	4
Total Income	111	121	142.06	156.21	41
Administration Expenses	35.5	44.5	33.148	39.74	12
Depreciations & Provisions	4.5	4.5	16.429	18.56	312.44
Total Expenses	40	49	50	58.3	46
Operating Income	76.3	75.93	92.471	97.9	28.31
Distribution to Depositors	0	19.93	31.212	26.586	#DIV/0!
Net Income	76.3	56.01	61.259	71.32	-6.53

5.4 Liquidity Analysis

The liquidity of a bank refers to its ability to meet deposits withdrawals, maturing liabilities, and requests for instant loans. A bank is considered liquid if it holds sufficient cash assets (cash in vault and balances at correspondent banks), holds other liquidable assets, such as securities that can be sold at no undue loss, and is able to obtain cash assets from the market as liabilities: for instance, federal funds purchases and securities sold under an agreement to purchase. Unfortunately, most of these kinds of liquidity resource are not compatible with Islamic *Shari'ah*, and are not available in the UAE financial market; they are therefore not available to Islamic banks in the UAE.²⁸⁵

The liquidity ratio is designed to measure the ability of a bank to meet short-term financial obligations without the need to liquidate its long-term assets.²⁸⁶ A liquidity problem or overtrading arises when most of the liquidity is provided internally by retained profits and externally by customers' deposits, and used by the bank to finance long-term assets, fixed assets and debtors. This situation results in the bank's facing a shortage in the liquidity required to meet short-term obligations.²⁸⁷

The findings of recent studies have revealed that Islamic banks are 40 per cent

²⁸⁵ Wood, Oliver G. and Robert J. Porter, *Analysis of bank financial statements*, Van Nostrand Reinhold, New York, 1979, p.24.

²⁸⁶ Tamari, M., *Financial ratios: Analysis and prediction*, Paul Elek, London, 1978, p. 29.

²⁸⁷ Pendlebury, Maurice and Roger Groves, *Company accounts: analysis, interpretation and understanding*, Fifth Edition, Thomson Learning, 2001, p.139.

more liquid than their conventional counterparts.²⁸⁸ In addition, Andrew Beikos of Capital Intelligence in Cyprus states that the risk profile of an Islamic bank is higher than that of a conventional bank for the following reasons:²⁸⁹

1. The variations in the returns on profit and loss sharing investments in Islamic banks affect liquidity management.
2. A large proportion of liquid assets expose an Islamic bank to liquidity risk.
3. The absence of hedging instruments against fluctuations in foreign currency exchange rates exposes Islamic banks to foreign exchange risks.
4. The reform of fiscal regulations by government (deregulation) exposes the Islamic bank to risk related to its investment in profit and loss sharing.

As already indicated, Islamic banks are characterized by high liquidity ratios, but there is an absence of liquid-based Islamic financial instruments to meet central bank rules as the lender of last resort.²⁹⁰ Receipt of interest is unlawful under Islamic *Shari'ah*, as "every increase stipulated in a debt is illegitimate usury."²⁹¹ Because of the ban on interest under Islamic *Shari'ah*, many hedging and liquidable instruments which are described as debt-based are not lawful, as, for example, treasury bills, corporate and municipal bonds and preferred stock.²⁹²

The liquidity ratio measures the bank's ability to meet its current liabilities or demand deposits;²⁹³ in other words, it measures the bank's ability to cover customers' withdrawals on the one hand, and to satisfy the borrowing requirements of business and industry on the other. The liquidity ratio of a bank is thus an indicator of short-term solvency and it measures the bank's ability to

²⁸⁸ Khan, Aamir, "Developing Shariah-compliant products & services to fit today's market", *Islamic Finance Summit*, London, January 2002, pp.23-24.

²⁸⁹ Obaidullah, Muhammed, "Capital adequacy norms for Islamic financial institutions", Available from : <http://www.islamic-finance.net/research/paper2.html>, [Accessed on 24 August 2004].

²⁹⁰ Al Omar, Fuad and Mohammed Abdel-Haq, *Islamic banking: Theory, practice & challenges*, Zed Books, New Jersey, 1996, pp. 105-106.

²⁹¹ Homoud, Sami Hassan, *Islamic banking*, Arabian Information, London, 1985, p. 148.

²⁹² Delorenzo, Yusuf Talal, "The religious foundation of Islamic finance", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromony Books and AAOIFI, London, 2004, p. 21.

²⁹³ Iqbal, Munawar, *Islamic banking and finance: Current developments in theory and practice*, The Islamic Foundation, Leicester, 2001, p. 373.

meet its obligations.²⁹⁴ For this reason, adequate liquidity is a requirement stipulated by the central bank, where it is called the Legal Reserve. In addition, the management of a bank might be more cautious and decide to keep an additional reserve, which is called the Prudent Reserve.²⁹⁵

At the same time, there are no standard liquidity ratios for banks, the reason for this being that the larger proportion of a bank's liabilities mature on demand and they are therefore not predictable, although a number of formulae may be applied to provide a snapshot of the liquidity position of a bank and to enable the management to monitor it continuously.²⁹⁶ The following formulae are usually used to calculate liquidity:

Cash + Accounts with Banks / Total Deposits (1)

Cash / Total Assets (2)

Total Financings / Deposits (3)

Total Financings / Assets (4)

Tables 5.7 and 5.8 illustrate the liquidity ratios of the DIB, ADIB and SIB for the past five years.

Table 5.7 Cash to total deposits ratios of the UAE Islamic banks

Year/Bank	DIB	ADIB	SIB
2001	11.6	5.1	50.7
2002	7.6	5.5	11.2
2003	6.9	6.3	9.5
2004	8.7	5.6	14.5
Average	8.7	5.63	21.48

Table 5.8 Cash to total assets ratios of the UAE Islamic banks

Year/Bank	DIB	ADIB	SIB
2001	10.2	3.9	30.1
2002	6.6	4.4	7.8
2003	6.0	5.3	6.8
2004	7.1	4.8	11.1
Average	7.48	4.6	13.95

²⁹⁴ Fraser, Lyn M., and Ailean Ormiston, *Understanding financial statements*, Sixth Edition, Prentice Hall, New Jersey, 2001, p.161.

²⁹⁵ Iqbal, Munawar, op. cit., p. 374.

²⁹⁶ Wood, Oliver G. and Robert J. Porter, *Analysis of bank financial statements*, Van Nostrand Reinhold, New York, 1979, p.38.

It appears from Tables 5.7 and 5.8 that Islamic banks in the UAE have excellent variable liquidity. For instance, SIB reported high liquidity with the highest score among the UAE Islamic banks: over the four-year period between 2001 and 2004, the average ratio of cash assets to total deposits was 21.5 per cent, and the ratio of cash assets to total assets was 14 per cent. The DIB came in second with a ratio of cash assets to total deposits of 8.7 per cent and a ratio of cash assets to total assets of 7.5 per cent, while the ADIB has maintained a lower but more constant level of liquidity, perhaps because the bank's management tends to take more financial risks in an attempt to generate higher profits; the bank thus recorded an average ratio of cash assets to total deposits of 5.63 per cent, and a ratio of cash assets to total assets of 4.6 per cent.

The third liquidity ratio is that of loans or financings to deposits. This ratio is considered very important and well recognized in banking financial analysis. High ratio results are preferable; however, the main problem with this ratio is that it does not provide a clear picture of future demands for financing, expected withdrawals of deposits or other liquidity needs in the form of liabilities.²⁹⁷

Table 5.9 Total Financings to Deposits ratio of the UAE Islamic banks

Year/Bank	DIB	ADIB	SIB
2001	100.3	124.7	113.4
2002	104.3	117.1	130
2003	106	112.3	126.8
2004	111.8	109.3	113
Average	105.6	115.85	120.8

To make this ratio applicable in Islamic banking, where the loans category is absent, we replace financings with loans, and the results are shown in Table 5.9.

At first glance, the table appears to reflect the fact that customers' deposits in all Islamic banks in the UAE were fully optimized. In particular, SIB used all its customers' deposits funds, in addition to 20.8 per cent channelled from other

²⁹⁷ Wood, Oliver G. and Robert J. Porter, *Analysis of bank financial statements*, Van Nostrand Reinhold, New York, 1979, pp. 38-42.

banks' fund resources, such as reserves and retained profits. The ADIB has also accessed customers' deposits funds and channelled additional funds from other banks' resources.

Table 5.10 Total Financings to Total Assets ratio of the UAE Islamic banks

Year/Bank	DIB	ADIB	SIB
2001	88.3	95.6	67.4
2002	91.2	94.8	89.7
2003	92.2	93.9	91.1
2004	91	94.4	86.9
Average	90.68	94.68	83.78

The financings to assets ratio is considered as an early warning sign ratio;²⁹⁸ it calculates the percentage of total financing activities with regard to the total assets of the bank. Table 5.10 shows the average ratios over four years of total financings to total assets for the UAE Islamic banks. These indicate clearly the competence of the banks' management in both minimizing investments in non-profitable assets which are considered not liquidable, such as fixed assets, and increasing the amount of profit-yielding assets. The average ratios for the UAE Islamic banks were 94.68, 90.68 and 83.78 per cent for the ADIB, DIB and SIB respectively.

Liquidity management in the banking industry can be controlled by carefully matching investments maturities with obligations maturities, such as customers' deposits and other bank deposits. Tables 5.11, 5.12 and 5.13 highlight the liquidity position of each of the Islamic banks in the UAE at the end of 2004. Assets and liabilities maturities are classified into two categories: short-term and long-term. As can be seen from the tables below, a feature common to all the Islamic banks in the UAE is that on the one hand they experience a liquidity shortage to satisfy their short-term obligations, while on the other hand they have redundant liquidity in the long term. Islamic banks are therefore requested to maintain sufficient liquidity according to international and domestic regulators'

²⁹⁸ Wood, Oliver G. and Robert J. Porter, *Analysis of bank financial statements*, Van Nostrand Reinhold, New York, 1979, p.43.

requirements to meet their unforeseen obligations, such as customers' withdrawals, since failing to do so may expose them to solvency problems.

Table 5.11 Analysis of Assets and Liabilities maturities of the DIB in 2004

Particulars	Short-term	Long-term
Cash	2292.969	0
Investment	14798.319	12917.892
Other Assets	474.431	129.75
Total Assets	17565.719	13047.642
Customers' Deposits	24941.006	0
Other Liabilities	2660.844	3011.401
Total Liabilities	27601.85	3011.401
Difference	-10036.131	10036.241

Table 5.12 Analysis of Assets and Liabilities maturities of the ADIB in 2004

Particulars	Short-Term	Long-Term
Cash	611.126	0
Investment	7649.957	4318.72
Other Assets	61.185	45.281
Total Assets	8322.268	4364.001
Customers' Deposits	9536.715	32.121
Other Liabilities	1670.511	1447.822
Total Liabilities	11207.226	1479.943
Difference	-2884.958	2884.058

Table 5.13 Analysis of Assets and Liabilities maturities of SIB in 2004

Particulars	Short -term	Long-Term
Cash	384.797	0
Investment	825.422	2174.697
Other Assets	35.642	34.03
Total Assets	1245.861	2208.727
Customers' Deposits	2481.495	0
Other Liabilities	308.197	664.896
Total Liabilities	2789.692	664.896
Difference	-1543.831	1543.831

These results confirm those of other studies, since they indicate that Islamic banks run higher risks than conventional banks in terms of credit, liquidity and

maturity mismatch.²⁹⁹ Table 5.14, below, sheds further light on this issue.

Table 5.14 Risk factor analysis comparison between conventional bank and Islamic bank

Contrasting Factors	Conventional Bank	Islamic Bank
Credit	Yes	Yes High
Liquidity	Yes	Yes High
Maturity Mismatch	Yes	Yes High
Currency	Yes	Yes
Trading and Interest rate	No	Yes
	Yes	No

Source: Al Omar, Fuad and Mohammed Abdel-Haq, *Islamic banking: Theory, practice & challenges*, Zed Books, New Jersey, 1996, p.105.

5.5 Profitability Analysis

The return on assets (ROA) and the return on equity (ROE) measure the overall efficiency of managing assets on the basis of whether or not this has generated high profits for shareholders.³⁰⁰ More specifically, the ROA reflects the ability of management to convert assets into earnings,³⁰¹ while the ROE reflects the efficiency of the bank's management in making a profit on behalf of the owners of its equity, equity being defined as share capital, undistributed profits and reserves.³⁰²

In addition, a group of ratios may be used to measure the efficiency of the management's decisions in achieving profits and to illustrate the main elements that contribute to achieving the targeted performance. These ratios include:

²⁹⁹ Arrif, Mohammed, "Islamic banking", *Asian-Pacific economic literature*, Vol. 2. No. 2, September 1988, pp. 46-62; and Archer, Simon and Rifaat A. Abdel-Karim, *Islamic finance: Innovation and growth*, Euromony Books and AAOIFI, London, 2004, p. 19; and Saleh, Nabil A., "Financial transactions and the Islamic theory of obligations and contracts", Chibli Mallat (ed.), *Islamic law and finance*, Graham & Trotman Limited, London, 1988, p. 157.

³⁰⁰ Iqbal, Munawar, *Islamic banking and finance: Current developments in theory and practice*, The Islamic Foundation, Leicester, 2001, pp. 376-377; and Fraser, Lyn M., and Ailean Ormiston, *Understanding financial statements*, Sixth Edition, Prentice Hall, New Jersey, 2001, p.170.

³⁰¹ Rose, Peter S., *Commercial bank management*, McGraw-Hill, Fourth Edition, 1999, pp. 158-159; and Fraser, Lyn M., and Ailean Ormiston, *Understanding financial statements*, Sixth Edition, Prentice Hall, New Jersey, 2001, p.170.

³⁰² Pendlebury, Maurice and Roger Groves, *Company accounts: Analysis, interpretation and understanding*, Fifth Edition, Thomson Learning, 2001, p.119.

Return on Equity Capital (ROE) = Net Income after Tax / Total Equity Capital (5)

Return on Assets (ROA) = Net Income after Tax/ Total Assets (6)

Net Operating Margin (NOM) = Operating Income / Total Assets (7)

Net Profit Margin (NPM) = Net Income / Total Operating Income (8)

Assets Utilization (AU) = Total Income / Total Assets (9)

Equity Multiplier (EM) = Total Assets/ Total Equity (10)

Earnings per Share = Net Profit / Number of Shares Issued (11)

Gross Profit Margin = Operating Income-Operating Expenses/Operating Expenses (12)

Table 5.15 ROE of the UAE Islamic banks

Bank/Year	2001	2002	2003	2004
DIB	12.3	10.1	13.8	15.4
ADIB	6.3	5.8	7.2	8.2
SIB	10.2	8.4	9.1	10.1

Table 5.15 indicates that the Islamic banks in the UAE have achieved a steady growth in return on equity, varying from 8.2 to 15.4 per cent in 2004. The ADIB achieved less return on equity in 2004, the reason for this being that its operations and administration expenses were very high, and its book was only worth about 45.6 per cent of total operation income in 2004. The DIB achieved the highest return on equity in 2004, as a result of the fact that the trade in equity or leverage of this bank is very high: its total assets amounted to around 32 billion AED in 2004, which is a much higher total than that of either the ADIB or SIB which amounted to around only 12.74 and 3.46 billion AED respectively, taking into consideration the small differences in paid capital among them that amounted to 1500, 1000 and 385.68 million AED for the DIB, ADIB and SIB respectively.

Table 5.16 ROA of the UAE Islamic banks

Bank/Year	2001	2002	2003	2004
DIB	1.0	0.8	1.0	1.4
ADIB	1.3	1.0	1.1	1.0
SIB	3.5	2.4	2.3	2.1

The return on assets (ROA) ratio shown in Table 5.16 illustrates the efficiency of the generation of profits from the banks' assets. In general, the ROA of Islamic banks in the UAE is insignificant. In 2004, SIB appears to have been more efficient than the DIB and ADIB, recording a return of 2.1 per cent, ahead of its rivals, which recorded a base return of 1.4 and 1 per cent respectively.

Table 5.17 Net Operating Margin (NOM) of the UAE Islamic banks

Bank/Year	2001	2002	2003	2004
DIB	4.1	3.1	3.3	3.2
ADIB	2.9	1.8	1.6	2.1
SIB	3.5	3.2	3.5	2.8

As can be seen from Table 5.17, the net operating margin ratio sheds light upon the ability of management to generate income from its investments; in this regard, all the banks under study show a dramatic decline in NOM ratio in comparison with the year 2001. The results also indicate that, in 2004, the DIB produced the best performance with 3.2 per cent, which reflects the fact that the bank appears to be deploying its financial resources optimally, while SIB came second with 2.8, and the ADIB lagged behind with only 2.1 per cent.

Table 5.18 NPM of the UAE Islamic banks

Bank/Year	2000	2001	2002	2003	2004
DIB	16	18.3	18.12	22.9	31.4
ADIB	26.5	30.0	30.13	37	25
SIB		69	46.3	43	45.65

The bank's net profit margin (NPM) ratio indicates the management's success in generating profits from sales.³⁰³ Table 5.18 shows that SIB achieved the highest percentage (45.6) of net profit in 2004, compared with 43 per cent in 2003, while the DIB came second with 31.4 per cent in 2004 compared with 22.9 in 2003, and the ADIB lagged behind its rivals with 25 per cent in 2004 compared with 37 per cent in 2003. An Islamic bank's net profit margin (NPM) measures the portion of net profit that remains after deducting operating expenses, administration expenses, prudent reserves and the portion of profit distributed to depositors. Unlike the fixed rate deposit method, where the interest paid to

³⁰³ Walton, Peter, *Financial statement analysis: An international perspective*, Thomson Learning, 2000, p.156

depositors is subtracted earlier from the interest earned as shown in the profit and loss statement, the portion of the profit of Islamic banks that is distributed to the owners of the deposits varies from one bank to another and depends on the terms of the contract based on *Mudarabah* and the mutual pool of profit. For instance, according to the deposits contract, the distributions of profit between the depositor and the UAE Islamic banks for one-year deposits are 80-20, 55-45, and 95-5 per cent for the DIB, ADIB and SIB respectively. Unfortunately, the details of the actual distributions of profits earned during the year between bank and depositors in those banks are not adequately disclosed in their financial reports, which may indicate that the portion of profit distributed to the depositors has been subject to manipulation by the board of directors. Figure 5.1 highlights this issue.

Figure 5.1 Distribution to Depositors as a percentage of Total Operating Income

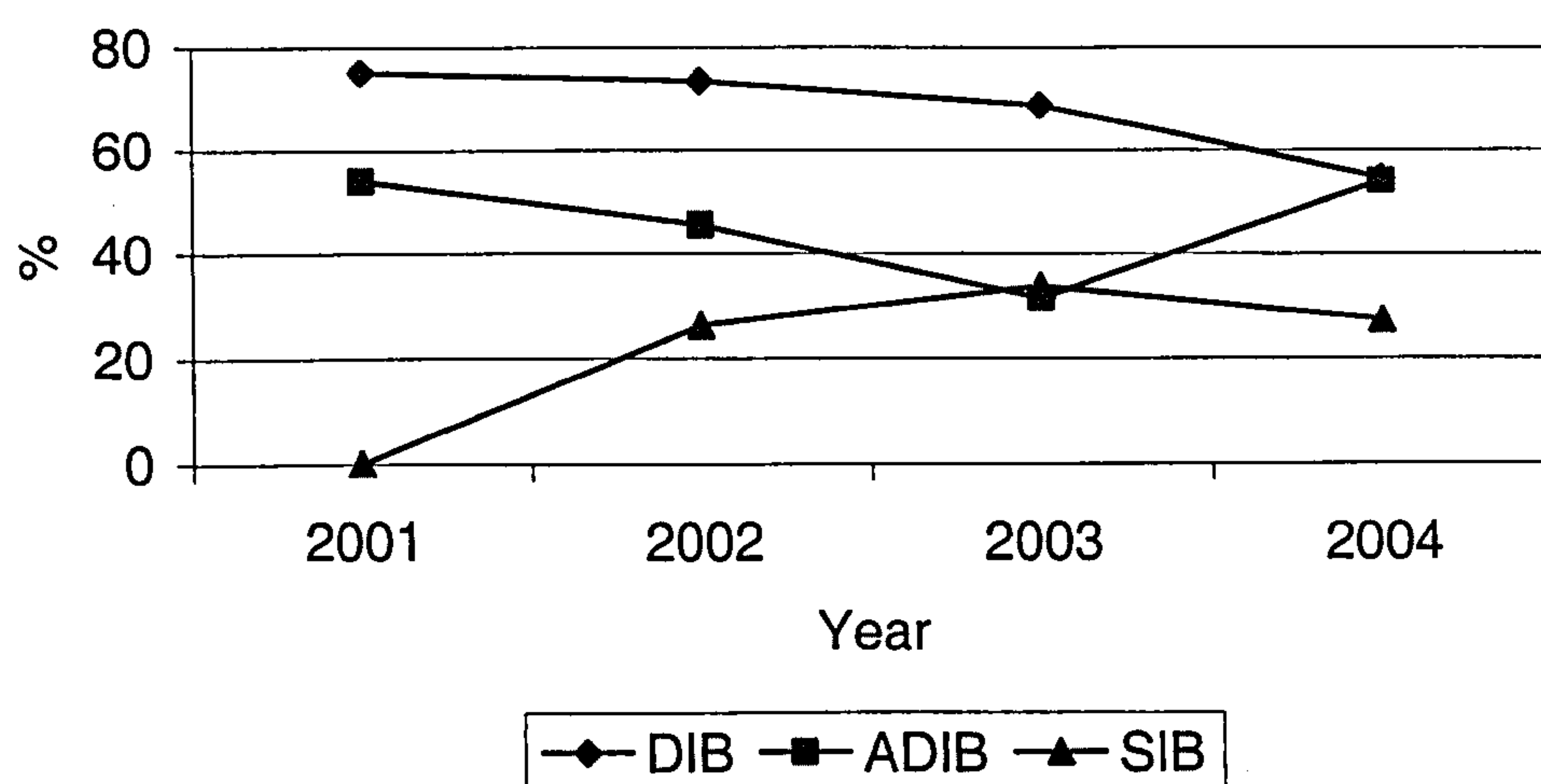


Table 5.19 AU of the UAE Islamic banks

Bank/Year	2001	2002	2003	2004
DIB	5.5	4.5	4.44	4.6
ADIB	4.4	3.2	3	3.85
SIB	5	5.1	5.4	4.52

The bank's assets utilization (AU) ratio indicates the ability of management to generate income from investments. This ratio is used for various reasons: for instance, if more assets are employed, when earning a specific income, if the portfolio shifts to high-yielding assets, if there is an increase in the interest ratio level, if management is making efforts to obtain higher yields on loans and

other assets and when there is an increase in fees and income not related to the employment of assets.³⁰⁴

Table 5.19 shows the percentages of profits of the Islamic banks that were generated from investments from 2001 until 2004. Comparing the trends, it appears that Islamic banks in the UAE have not been able to enhance their assets utilization ratios, which range from 3 to 6 per cent. With regard to ranking, in 2004, the DIB enjoyed the highest ratio with 4.6, SIB came second, while the ADIB was last with 3.8 per cent.

Table 5.20 EM of the UAE Islamic banks

Bank/Year	2001	2002	2003	2004
DIB	1225.2	1238	1355.3	1077.73
ADIB	477.5	608.4	658	846.3
SIB	294.3	356.5	390.4	491.6

Table 5.20 shows the bank's equity multiplier (EM), which presents bank assets in relation to shareholder equity. As expected, the DIB enjoyed the highest score in 2004, with its capital equity multiplied 11 times, compared with 13.5 times in 2002. This means that every one Dirham of capital equity represents 13.5 Dirham in assets, reflecting the fact that the DIB has excessively traded in equity. The ADIB multiplied its capital equity 8.5 times in 2004 compared with 6.6 times in 2003, while the SIB lagged behind its rivals, having multiplied its equity only 5 times in 2004 compared with 4 times in 2003.

Table 5.21 Earnings per Share Development at the UAE Islamic banks

Bank/Year	2001	2002	2003	2004
DIB	1.53	1.58	2.32	4.00
ADIB	0.805	0.756	1.006	1.23
SIB	0.52	0.36	0.4	0.46

An earnings per share (EPS) measures the growth of profitability or the return on shareholders' investments where the major strategic target of management is to maximize the shareholders' wealth. It divides the net profit generated from

³⁰⁴ Wood, Oliver G. and Robert J. Porter, *Analysis of bank financial statements*, Van Nostrand Reinhold, New York, 1979, p. 79.

business operations by the number of capital shares.³⁰⁵ Table 5.21 shows that the EPS ratio of the Islamic banks in the UAE has been climbing steadily each year.

Table 5.22 Gross Profit Margin of the UAE Islamic banks

Bank/Year	2001	2002	2003	2004
DIB	182.5	121	178	125
ADIB	88.2	24	17	19.25
SIB	91	55	85	68

Gross Profit Margin (GPM) is a ratio that on the one hand measures the bank's ability to generate profits from operations, and on the other, measures the management's ability to keep costs under control.³⁰⁶ Table 5.22 illustrates the GPM ratios of the UAE Islamic banks from 2001 until 2004; it shows that the DIB came out on top in 2004, recording the highest profit margin with 125 per cent; second was SIB with 68 per cent, while the ADIB lagged behind with 19 per cent.

5.6 Efficiency Analysis

The efficiency ratios measure the bank's efficiency in handling bank operations with minimum expenses. It assesses whether the management of the bank has been working in a cost-effective manner or not.³⁰⁷ We have chosen a number of ratios that can be applied to assess the management efficiency of Islamic banks in the UAE, as follows:

Expenses / Total Assets (13)

Total Cost / Total Income (14)

Total Investment / Number of Employees (15)

Total Deposits / Number of Employees (16)

Net Income / Number of Employees (17)

³⁰⁵ Walton, Peter, *Financial statement analysis: An international perspective*, Thomson Learning, 2000, p.157

³⁰⁶ Wood, Oliver G. and Robert J. Porter, *Analysis of bank financial statements*, Van Nostrand Reinhold, New York, 1979, pp. 74-75.

³⁰⁷ Iqbal, Munawar, *Islamic banking and finance: Current developments in theory and practice*, The Islamic Foundation, Leicester, 2001, p. 377.

Table 5.23 Expenses/Total Assets Ratio of the UAE Islamic banks

Bank/Year	2001	2002	2003	2004
DIB	1.4	1.4	1.2	1.4
ADIB	1.5	1.4	1.4	1.8
SIB	1.8	2.1	1.9	1.7

Table 5.23 shows that SIB was the best in terms of percentage of expenses in relation to total assets during the time of this study. In general, all the banks are shown to have firm control over their expenses, since the differences between the ratios for each year are insignificant.

Table 5.24 Total Cost /Total Income Ratio of the UAE Islamic banks

Bank/Year	2001	2002	2003	2004
DIB	26.1	30.9	26.3	30.8
ADIB	34.7	44.6	46.2	45.6
SIB	36.0	40.5	35.2	37.3

Table 5.24 illustrates the percentage of costs in relation to total income in each of the banks. It is clear that the DIB has recorded lower expenses percentages, while the ADIB has incurred higher expenses, especially in the last three years. This may be the result of the fast growth in the domestic branch network of the ADIB in the last year, which represented high capital expenditure for the bank.

Employees' performance is an effective indicator of management efficiency, as it reveals how the management deploys the bank's manpower. The marketing efforts of bank employees are expressed in the form of customers' deposits; the investing efforts of bank employees are expressed in the form of investments, and the net income allocated to the number of employees gives an excellent indication of the employees' productivity at the bank. Since the employees' performance ratios are not represented as percentages, it is not possible to make comparisons between the performances of the three banks, so instead we have carried out a trend analysis by comparing the performance of each bank in different years.

Table 5.25 DIB Employees' Efficiency (millions of AED)

Employees' Efficiency/Year	1999	2000	2001	2002	2003	2004
Total Investment/No. of Employees	10.7	12.8	15.41	11.6	12.8	19
Customers' Deposits/No. of Employees	9.6	11.7	15	11	12	16
Net Income/No. of Employees	0.13	0.14	0.17	0.1	0.14	0.3

Table 5.25 illustrates the DIB employees' performance in respect of marketing efforts in the form of customers' deposits, investing efforts in the form of investments, and the return yielded in the form of net income per employee. The results of a horizontal comparison with previous years indicate that the DIB was able to achieve a steady growth until 2001, followed by a sudden drop in 2002, from which it had rapidly recovered a year later.

Table 5.26 ADIB Employees' Efficiency (millions of AED)

Employees' Efficiency/Year	1999	2000	2001	2002	2003	2004
Total Investment/No. of Employees	10.5	15	17	19	18	12
Customers' Deposits/No. of Employees	6.2	10	12.5	13	13	16
Net Income/No. of Employees	0.1	0.2	0.2	0.2	0.2	0.2

Table 5.26 shows a horizontal comparison with previous years' results for the ADIB, which indicates that the employees' efforts in terms of investing declined dramatically from 2003, after a steady growth between 1999 and 2002, while employees were able to boost their marketing efforts in terms of mobilizing deposits, these results being reflected in the net income per number of employees figure, which remained at the same level.

Table 5.27 SIB Employees' Efficiency (millions of AED)

Employees' Efficiency/Year	2001	2002	2003	2004
Total Investment/No. of Employees	6.7	8.7	8.9	9.2
Customers' Deposits/No. of Employees	4.9	6.4	6.8	7.54
Net Income/No. of Employees	0.34	0.23	0.23	0.22

Table 5.27 illustrates the results of a horizontal comparison with previous years for the SIB; these reveal that the bank was able to achieve a steady growth in terms of employees' performance measurements.

5.7 Resources Deployment Analysis

The fund resources of Islamic banks consist of the owner's equity and reserves in addition to the customers' deposits, including current accounts that are based on *Wakalah* or *Qurd-al-hassan*, where the equity owners guarantee the principal and the holders of the accounts have no right to receive any return, savings accounts that are based on the profit and loss sharing concept, or *Mudarabah*, on which some return resulting from investments is distributed, and investment accounts which are also based on the *Mudarabah* contract, in which neither the principal nor the return is guaranteed and the return cannot be predefined.³⁰⁸

The following formulas assess the efficiency of these funds or of the bank's deployment of resources.³⁰⁹

Total Investments / Total Equity + Total Deposits (18)

Total Investment / Total Liabilities (19)

Earning Assets Ratio: Total Investment / Total Assets (20)

Financings / Total Deposits (21)

Table 5.28 Total Investments / Total Equity + Total Deposits

Ratio/Year	1999	2000	2001	2002	2003	2004
DIB	96	97	92	95.5	98	100
ADIB	96	104	98	97	95	96
SIB			72	92	93.5	89

Table 5.28 illustrates the banks' investment percentages from the major fund resources; it seems that all the banks have been able to deploy their available fund resources in an efficient way: in 2004, the DIB took the lead, deploying 100

³⁰⁸ Iqbal, Zamir, "The development of Islamic financial institutes and future challenges", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromoney Books and AAOIFI, London, 2004, p. 45.

³⁰⁹ Iqbal, Munawar, *Islamic banking and finance: Current developments in theory and practice*, The Islamic Foundation, Leicester, 2001, p. 376.

per cent of its fund resources, the ADIB deployed 96 per cent and SIB deployed 89 per cent.

Table 5.29 Total Investments / Total Liabilities of the UAE Islamic banks

Ratio/Year	1999	2000	2001	2002	2003	2004
DIB	102	101	95	99	101	106
ADIB	167	141.5	123	116	111	107.5
SIB			109	125	122	109

Interestingly, Table 5.29 indicates that the ADIB was the most efficient Islamic bank in the UAE in deploying its fund resources from the beginning of its provision of services to the public, coming top of the table in 1999 and 2000 with 167 and 141.5 per cent, compared with 102 and 101 per cent for the DIB. Unfortunately, its efforts have gradually started to fade, for the reason that, at the beginning, the bank's fund resources consisted of a small pool, which could be easily deployed, but as its fund resources became bigger, the deployment function also became more complicated.

By the end of 2002, another player had taken the lead: the SIB achieved an impressively high rate of deployment (125 per cent), while in 2004, the SIB also achieved the highest rate, with 109 per cent. In summary, all the banks have been able to deploy their fund resources in an efficient way.

Table 5.30 Earning Assets Ratio of the UAE Islamic banks

Ratio/Year	1999	2000	2001	2002	2003	2004
DIB	90	90	88	91	92	91
ADIB	93.5	96	96	95	94	94
SIB			67	90	91	87

Earning assets ratio is an important measurement of resources deployment that highlights the percentage of operating assets out of the total income-producing assets. Table 5.30 shows that all three banks have recorded a significant and steady growth in the EA ratio, all of them achieving over 90 per cent in 2004.

Table 5.31 Financings /Total Deposits Ratio of the UAE Islamic banks

Ratio/Year	1999	2000	2001	2002	2003	2004
DIB	109.3	108.0	99.8	103.8	105.3	111.2
ADIB	168.5	144.6	124.7	117.1	112.3	109.3
SIB			113.4	130.0	126.8	113.0

Table 5.31 illustrates the percentage of customers' deposits optimization through investing ducts in the banks. It appears that all the Islamic banks have been able fully to optimize their customers' deposits; however, although the ADIB was able to optimize 100 per cent of its customers' deposits in 2004, it recorded a dramatic decline between 1999 and 2004 which may be explained by the fact that the increase in the customer deposits book was used instead of the usage of other fund resources, such as owner's equity.

5.8 Capital Strength Analysis

Monitoring the monetary structure of the bank is part of the management's responsibility in inspiring more trust in, and giving assurance to, the bank's stakeholders. The management of a bank is obliged continuously to assess the financial performance of the bank for many reasons, including: the need to comply with central bank requirements; for the purposes of defending limits or cushioning, to meet its obligations to its creditors; and the fact that the amount of capital held by the bank affects the rate of return to equity owners.³¹⁰ In this regard, the following ratios measure the worthiness of the bank's monetary structure:

Total deposits/ Total Liabilities + Owner's equity (22)

Owner's equity / Total Liabilities + Owner's equity (23)

Leverage ratio: Equity Capital + Reserves / Total Assets (24)

Risk Assets Ratio: Equity Capital / Total Assets-(Cash + Treasury securities)³¹¹ (25)

Table 5.32 Total deposits/ Total Liabilities + Owner's equity

Bank / Year	2001	2002	2003	2004
DIB	85	86	86	80.5
ADIB	71	67	66.4	75.4
SIB	52	66	69.4	71

³¹⁰ Iqbal, Munawar, *Islamic banking and finance: Current developments in theory and practice*, The Islamic Foundation, Leicester, 2001, pp. 370-371.

³¹¹ Wood, Oliver G. and Robert J. Porter, *Analysis of bank financial statements*, Van Nostrand Reinhold, New York, 1979, p.54.

Table 5.33 Owner's equity / Total Liabilities + Owner's equity

Bank / Year	2001	2002	2003	2004
DIB	8	8	7	10
ADIB	21	17	15	13
SIB	35.5	28	26	20

The relation between debt and equity in a bank differs from that in other business firms; in a trading company, for instance, a high recorded debt may minimize the equity owner's profits. This relation has been expressed by one researcher as follows: "The higher the proportion of debt to equity in the capital structure of a company the more volatile the residual rewards available to equity will become and the greater will be the financial risk perceived by ordinary shareholders".³¹² In a bank, by contrast, the concept is reversed, and a high value of booked debts as a source of funds generates a high return on the equity owner's fund, although it also exposes the bank to a high risk.

Tables 5.32 and 5.33 indicate that the UAE Islamic banks are gradually moving towards undertaking more risk by increasing their trade operations, depending on debts in the form of customers' deposits rather than on equity owners. In 2004, the customers' deposits in the DIB, for instance, represented more than 80 per cent of its total fund resources, and the ADIB and SIB customers' deposits represented 75 and 71 per cent respectively, while the owner's equity in the DIB, ADIB and SIB represented as little as 10, 13 and 20 per cent respectively.

Table 5.34 Leverage ratio: Equity Capital + Reserves / Total Assets

Bank / Year	2001	2002	2003	2004
DIB	8	8	7	9
ADIB	21	16	15	12
SIB	34	28	26	20

Leverage or gearing refers to the right to trade on equity: in other words, shareholders may receive a huge amount of profit on a very small amount of paid capital by relying on debt as a source of funds, which in turn exposes the bank to financial risk and may end in bankruptcy. The financial risk arises

³¹² Pendlebury, Maurice and Roger Groves, *Company accounts: Analysis, interpretation and understanding*, Fifth Edition, Thomson Learning, 2001, p.147.

because the interest paid on the borrowed funds is paid irrespective of the results of the bank's investment operations, while equity funds serve as a protective cushion against this unexpected financial risk.³¹³ However, in an Islamic bank, the risk of leverage or gearing does not exist, since this type of bank depends mainly on customers' deposits which are based on profit and loss sharing, and the only instance in which the bank might be asked to bear the whole loss is if it is proven that the bank's management has been negligent.

Table 5.34 illustrates the financial leverage position of the UAE's Islamic banks, and shows that the DIB has the highest ratio of leverage with 9 per cent, while the ADIB is second with 12 per cent and the SIB third with 20 per cent. While the DIB was striving to decrease its leverage, the other Islamic banks were aiming to increase theirs.

Table 5.35 Risk Assets ratio of the UAE Islamic banks

Bank / Year	2001	2002	2003	2004
DIB	9	9	8	10
ADIB	22	17	16	12
SIB	49	30	27.5	23

Table 5.35 illustrates the risk assets ratios of the UAE Islamic banks. This ratio is very similar to the leverage ratio, the only difference residing in the denominator, where liquidable assets such as cash and treasury notes are subtracted. The importance of this ratio stems from the fact that every asset is exposed to loss, which in turn decreases the shareholders' equity.³¹⁴

As can be seen from the table above, the DIB has been more prepared to take risks in 2004, recording only 10 per cent, while the ADIB and SIB recorded a continuous decline after 1999; they decreased their equity owners' coverage of risky assets to harvest more profits using depositors' funds.

³¹³ Tamari, M., *Financial ratios: Analysis and prediction*, Paul Elek, London, 1978, p. 34.

³¹⁴ Wood, Oliver G. and Robert J. Porter, *Analysis of bank financial statements*, Van Nostrand Reinhold, New York, 1979, p. 53.

5.9 Capital Adequacy

Capital adequacy is defined as the bank's ability to absorb the losses sustained during banking operations as a defensive barrier to guard against insolvency.³¹⁵

Capital adequacy monitoring has a number of purposes, including:

1. To make the bank's management more capable of absorbing the losses that result from banking operations;
2. To promote trust between bank and depositors;
3. To control the financial resources of fixed assets that are financed by owner's equity alone;
4. To monitor trade in equity;
5. To make management better able to mobilize more deposits;
6. To enable management to develop the financial operations of the bank, and
7. To achieve conformity with international standards requirements, such as those of the Basle Accord.

The Basle Accord on International Capital Standards set down certain requirements and ratios with which to calculate and test the capital adequacy of banks. The Basle norms were established to ensure that banks have sufficient capital to cover or absorb the credit and market risks that are inherent in the assets acquired by the banks.³¹⁶

Previously, we mentioned that Islamic banks have a particular character that distinguishes them from conventional banks; a special treatment is therefore recommended to measure the capital adequacy ratio (CAR) of Islamic banks, in order to reflect their risk exposure precisely. In fact, Islamic banks are exposed to commercial, fiduciary and displaced commercial risks that may be described in more detail as follows:³¹⁷

1. Normal commercial risk, including market risk, is related to instability in the economic environment, such as that produced by inflation and interest rate

³¹⁵ Iqbal, Munawar, *Islamic banking and finance: Current developments in theory and practice*, The Islamic Foundation, Leicester, 2001, pp. 370-374.

³¹⁶ Capital Adequacy Ratio, Available from: <http://www.Karimconsulting.com/newsletter/newsletter017.htm>. [Accessed on 24 August 2004].

³¹⁷ Accounting and Auditing Organization for Islamic Financial Institutions, *Statement on the purpose and calculation of the capital adequacy ratio for Islamic banks*, AAOIFI, March 1999, pp. 6-10.

fluctuations, that might hit the profit-sharing investment accounts (PSIA), but which does not affect the bank's capital.

2. Fiduciary risk reflects management delinquency and it does affect the bank's capital.

3. Displaced commercial risk affects the bank's capital and is defined as a proportion of the shareholders' return which has been disclaimed and given to deposit-holders in order to retain them in the bank and to neutralize the competition of other banks who distribute a competitive interest rate to their customers. In this case, the risk lies with the shareholders, as a proportion of their return on their equity is disclaimed.

The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) has therefore devised an amended CAR formula, based on the idea that only 50 per cent of profit-sharing investment accounts (PSIA) should be included for the purposes of the CAR calculation for Islamic banks. While Basle II required 100 per cent capital weighting for *Murabaha*, *Ijarah* and *Musharakah*, the Islamic Financial Services Board (IFSB), who are responsible for coordinating with the Basle committee to harmonize the AAOIFI standards with Basle II requirements, recommended only 35 per cent as fair risk weighting for Islamic finance products.³¹⁸

It is important to note that investments in Islamic banks are divided into two types: these are profit and loss sharing investments, including *Mudarabah* and *Musharakah*, and mark-up base investments, including *Murabaha*, *Ijarah* and *Salam*. Thus, AAOIFI rules on calculating the CAR ratio dictate that there should be no inclusion of profit-sharing investment accounts (PSIA) in the risk-bearing capital, while all assets which are financed by debt-based liabilities and owner's equity should be included in the denominator of the CAR equation, and 50 per cent of PSIA-financed assets should be included in the denominator of the CAR equation. As in the Basle Accord, the AAOIFI requires the Islamic bank's capital adequacy ratio to be not less than 8 per cent.³¹⁹

³¹⁸ Aquil, Bilal, "Basle II – capital adequacy for Islamic retail products", Sohail Jaffer (ed.), *Islamic retail banking and finance: Global challenges and opportunities*, Euromoney Books, London, 2005, pp. 212-213.

³¹⁹ Muljawan, Dadang, et al., "A capital adequacy framework for Islamic banks: The need to reconcile depositors' risk aversion with managers' risk taking", *Department of Economics*,

$$CAR^{320} = \frac{OC}{W_{OC+L} (OC+L) + W_{PSIA} (0.5*PSIA)} \quad (26)$$

where:

OC= Capital including Tier 1 and Tier 2 according to the Basle Accord.

L= other liabilities such as current account, etc.

PSIA= profit-sharing accounts (excluding the prudential reserves which exist in Tier 2).

W= average risk weighting of assets.

WOC+L= average risk weighting of assets financed by capital and other liabilities.

WPSIA= average risk weighting of assets financed by PSIA (Restricted and Unrestricted).

Nevertheless, a number of researchers have criticized the AAOIFI formula for this CAR calculation. Some claim that the formula succeeds only in enhancing the solvency level, while ignoring the agency role of an Islamic bank, and that the formula is inconsistent with AAOIFI standards, especially those relating to accounts classification, where the restricted profit-sharing investment account is excluded from liabilities. Finally, the formula disregards the legal risk that exists in the profit-sharing investment since it is sometimes referred to as a “hybrid”.

When calculating the capital adequacy of banks, capital is divided into two parts. The first part is called Tier one; this is the core capital, which includes paid up shares, published reserves, minority interest, profit of the year, goodwill and other intangible assets, own shares held, shortfall in provision and current year loss. Tier two is supplementary capital, including undisclosed reserves, revaluation of assets, revaluation of bank's property assets, hybrid debt or equity capital instruments and subordinated term loans. From the total capital in Tier one and Tier two are deducted investments in unconsolidated companies, investments in subsidiaries, investments in associated companies and

Loughborough University, UK, 2002, Available from: <http://www.iboro.ac.uk/departments/ec/researchpapers/research2002b.htm>, [Accessed on 29 August 2004].

³²⁰ Accounting and Auditing Organization for Islamic Financial Institutions, *Statement on the purpose and calculation of the capital adequacy ratio for Islamic banks*, AAOIFI, March 1999, pp. 6-10

investment in other banks or financial institutions. In this regard, the UAE central bank issued a circular stipulating that, from July 1993, all banks operating in the UAE must maintain a risk assets ratio of a minimum of 10 per cent and Tier one capital at a minimum of 6 per cent of total risk weighted assets, while Tier two must be up to a maximum of 67 per cent of Tier one. The average risk weighted assets (ARWA) and Off-balance sheet items are calculated by classifying them into four risk categories, as illustrated in Table 5.37. The total of weighted off-balance sheet items and the bank's assets in each category are multiplied by the risk weight that they are related to.

According to the Basle Accord requirement, the CAR ratio should be maintained by the banks at a minimum of 8 per cent, and according to the UAE Central Bank, the CAR requirement is set at a minimum of 10 per cent.³²¹ It is clear from Table 5.36 that Islamic banks in the UAE are compliant with both requirements.

Table 5.36 The Capital Adequacy Ratio of the UAE Islamic banks

Bank	CAR %		
	2002	2003	2004
DIB	13.33	10.1	13.47
ADIB	31.86	22.19	20.65
SIB	95.88	77.85	47.71

Source: Structured interview with Mr. Saleh Allaw, Head of Research and Statistics, the UAE Central Bank, Abu Dhabi, 17 April 2005.

³²¹ The UAE Central Bank, *Capital adequacy requirements*, Circular 13, 1993, Available from: <http://www.uaecb.gov.ae/annual-report.htm>, [Accessed on 10 June 2004].

Table 5.37 Basle weighting categories for bank's assets and Off-balance sheet items

Category	Assets	Weight %
Risk-free assets	<ul style="list-style-type: none"> - Cash held in the bank or in transit (domestic and foreign). - Balance due from central bank. - Claims on or that are unconditionally guaranteed by governments. - Net assets in the form of gold. - Non-conditional commitments in Off-balance sheet. 	Zero
Very low-risk assets	<ul style="list-style-type: none"> - Cash items in the process of collection. - Claims guaranteed by governments. - Bank-to-bank Letter of Credit and Short-term commitments in Off-balance sheet. 	20
Riskier assets	<ul style="list-style-type: none"> - Revenue bonds or claims where the government guaranteed the revenue only. - Credit contracts: interest rate and foreign exchange-related. - Urgent commitments: Construction and trade-related Letter of Guarantee. 	50
Highest category risk	<ul style="list-style-type: none"> - Claims on private party - Fixed assets - Investments in unconsolidated subsidiaries and joint ventures or associated companies if not deducted from capital. - Loans guarantees, transferable letter of guarantee and negotiable financial commitments in off-balance sheet. 	100

Source: Walton, Peter, *Financial statement analysis: An international perspective*, Thomson Learning, 2000, pp.484-489.

5.10 SWOT Analysis

A SWOT analysis will now be applied to identify the internal strengths and weaknesses that have been revealed by the above financial analysis of the UAE Islamic banks. In addition, the possible opportunities and threats that a bank might encounter will be highlighted.

5.10.1 Strengths

1. The financial analysis of the UAE Islamic banks over the last four financial years has shown that they have recorded a high growth in

customers' deposits, investments, net income and in the profits distributed to depositors. In particular, the DIB and ADIB have achieved an impressive growth in owner's equity and earnings per share.

2. Islamic banks in the UAE were able to record a handsome growth in 2004 in the return on equity ratio (ROE), which grew to 15.4, 8.2 and 10 per cent for the DIB, ADIB and SIB respectively, a result which may be attributed to the excessive dependence on leverage, in particular on customers' deposits, which in turn explains the high equity multiplier rate, that in 2004 grew 11, 8.5 and 5 times for the DIB, ADIB and SIB respectively.
3. Financial analysis results show that Islamic banks in the UAE appear to be more very efficient in managing their fund resources, in contrast with the findings of other studies which have indicated that Islamic banks are suffering from a high liquidity being unemployed.³²²
4. The Islamic banks in the UAE have been able to record great capital strength and good risk management, with the recorded capital adequacy rate being better than that required to comply with both the Basle Accord and the UAE central bank. Also, the leverage ratio has been within a reasonable range, being recorded at between 9 and 20 per cent in 2004, while the risk assets ratio was also within an acceptable range - between 10 and 23 per cent in 2004.
5. All Islamic banks have been efficient in controlling their expenses and the productivity of their employees over the past four years. For instance, the expenses to assets ratio indicated that expenses represent only between 1.4 and 1.8 per cent of total assets, and between 31 per cent and 46 per cent of total income in 2004. Employee productivity also recorded a steady growth from 2001, in particular in the ratio of deposits to number of employees, which in 2004 was recorded as being 16, 16 and 7.5 per cent in the DIB, ADIB and SIB respectively.
6. All Islamic banks in the UAE have been able to achieve encouraging resources management ratios, which in turn reflect the success of their managements in deploying the available fund resources. For instance, in 2004, investments accounted for more than 89 per cent of equity and

³²² Khan, Aamir, "Developing Shariah-compliant products & services to fit today's market", *Islamic Finance Summit*, London, January 2002, pp.23-24.

deposits, more than 106 per cent of total liabilities, and for nearly 87 per cent of total assets.

5.10.2 Weaknesses

1. Islamic banks in the UAE should take into consideration the mismatching of Assets-Liabilities maturities which led to a lack of liquidity management, since the majority of deposits are short-term deposits (payable after one year) and the majority of assets are longer term (payable on instalments over more than one year). For instance, in 2004, customers' deposits represented between 64 per cent and 89.5 per cent of total financings and between 77 per cent and 84 per cent of total assets, while liquidity represented as little as 6 per cent of customers' deposits and 5 per cent of total assets. Nevertheless, some researchers have argued that Islamic banks in general have been able to manage their liquidity requirements by using their surpluses of unemployed liquidity reserves, such as the Profit Equalization Reserve (this means that a proportion of the depositor's share of the profit is kept as a reserve), in addition to calculating a high *Murabaha* profit rate; Islamic banks are therefore unlikely to be exposed to the risks of solvency and bankruptcy.³²³
2. Islamic banks in the UAE recorded insignificant achievements in 2004 in terms of profitability indicators such as the following: return on assets (ROA), that was recorded as being only 2.1, 1.4 and 1 per cent for the SIB, DIB and ADIB respectively; net operating margin (NOM), that was recorded as only 3.2, 2.8 and 2.1 per cent for the DIB, SIB and ADIB respectively; assets utilization (AU), recorded at 4.6, 4.5 and 4 per cent for the DIB, SIB and ADIB respectively.
3. Islamic banks in the UAE seem to suffer from a lack of highly qualified professionals in the fields of risk analysis, portfolio management and Islamic finance business development who have a solid grounding in both Islamic *Shari'ah* and banking.³²⁴

³²³ Ibrahim, Badrel-deen A., "Liquidity in Islamic banks", *Al Khaleej Newspaper*, No.8869, 31/8/2003, p. 7.

³²⁴ Kotby, Hussein E., "Financial engineering for Islamic banks: The option approach", *Working Papers Series*, IMES-I.U.J, No. 23, November 1990, p. 38.

4. There is a lack of product diversification and service quality programmes produced through support research and development efforts.
5. There is a shortage of detailed financial reports that provide a high degree of information transparency.³²⁵ The annual reports of Islamic banks should make available full details of the bank's operations and detailed figures relating to business transactions.³²⁶
6. Islamic banks do not make intensive use of the *Musharakah* and *Mudarabah* modes of finance, which are the core of Islamic banking, as a result of a number of factors: for instance, a lack of moral hazard, which is caused by concealing the profit, as the *Mudarib* may attempt to absorb the profit earned from an operation by distributing it in unauthorized perquisites; asymmetric information; the structure of incentives exchanged between PLS parties; the nature of the relationship between the principal and the agent; and the absence of an efficient monitoring mechanism to monitor the progress of profit and loss sharing projects.³²⁷

5.10.3 Opportunities

1. The advanced infrastructure and the high-tech environment available in the UAE will enable Islamic banks to adopt advanced IT-based solutions to achieve the following goals³²⁸:

- a. Enable the management to control the cash flow through tracking incoming and outgoing transactions.
- b. Daily analysis of potential investment projects and the provision of a predicted return on the investment (ROI).
- c. Good management of the governor's requirements, such as capital adequacy ratio, liquidity ratio and compulsory reserves.
- d. Efficient risk management by adopting an investments diversification approach, in which the advanced information

³²⁵ Wilson, Rodney, "The interface between Islamic and conventional banking", Munawar Iqbal and David T. Llewellyn (eds.), *Islamic banking and finance*, Edward Elgar, Cheltenham, 2002, p. 201.

³²⁶ Saleh, Nabil A., "Financial transactions and the Islamic theory of obligations and contracts", Chibli Mallat (ed.), *Islamic law and finance*, Graham & Trotman Limited, London, 1988, p. 159.

³²⁷ Iqbal, Munawar and David T. Llewellyn, *Islamic banking and finance*, Edward Elgar, Cheltenham, UK, 2002. pp. 7-13.

³²⁸ Boudy, Khalid Muhammed, "Managing assets and liabilities in Islamic banks", *Investors*, Kuwait Group Company for Publishing and Distribution, Kuwait, No. 34, 2005, pp. 92-95.

system will enable the bank's management to obtain several investment scenarios.

- e. Enabling the bank's management to prepare a pro-forma balance sheet for the purposes of preparing financial budgets, decision making and structuring the financial risk.
- f. Boosting the level of service quality and customer satisfaction, and as a result being able to retain their customers.

2. The mushrooming of real estate projects in the domestic market provides huge financial and investment potential for Islamic banks in the market.

3. Islamic banks in the UAE have the opportunity to expand into GCC countries. This will, on the one hand, vastly increase their customers' deposits book value, which is the major source of funds, and on the other hand, it will make available more public utilities projects, as well as business finance, which in turn will result in the efficient deployment of the banks' funds and the achievement of a steady growth in profits.

5.10.4 Threats

1. Competition is the major threat facing Islamic banks in the UAE: as already mentioned in the preceding chapters, globalization, deregulation and free trade agreements will attract more foreign banks to operate in the market. On the other hand, the impressive growth of the Islamic banking business has attracted the attention of conventional banks in the market; recently, for example, the Emirates bank group converted the Middle East Bank into the Emirates Islamic bank; the Mashreq bank has also opened an Islamic banking window for *Murabahah* financing, and HSBC has recently extended the Amana finance scheme to include *Murabahah*.

2. The deregulation laws that are issued by the central bank of the UAE do not take into account the unique nature of Islamic banking. For instance, the central bank of the UAE does not differentiate between Islamic banks and conventional banks in the calculation of the prudent reserve.³²⁹ More specifically, the central bank does not differentiate between the nature of accounts and applies the same reserve formula to

³²⁹ Yousri, A. A., —, Available from: <http://www.islamiceconomics.4t.com/>, [Accessed on 6 June 2004]

all banks. In fact, a conventional bank can minimize the required reserve by including some of its short-term notes and stocks as cash assets. However, an Islamic bank cannot do this, because such notes and stocks do not comply with Islamic *Shari'ah* rules.³³⁰ Most stocks and securities, such as treasury bills, corporate and municipal bonds and preferred stock, in addition to most financial hybrids, such as derivatives, short selling, buying on margin, futures and options, contain elements of monopoly, pre-determined interest, speculation and *Gharar*³³¹ or *jahalah*,³³² and are therefore not acceptable under *Shari'ah* law.³³³ The result is that a conventional bank can use as much liquidity as it has available for its financing operations, while Islamic banks are not allowed this privilege.³³⁴

3. The development of Islamic banks in the UAE is slower than that of conventional banks. In particular, innovation processes are slower in Islamic banks, being directed mainly towards short and medium-term instruments, while innovation is rarely conducted in long-term instruments and risk management tools: for instance, hedging against high volatility in currency and commodities markets.³³⁵

4. Typical *Shari'ah* board members lack the necessary economic and financial qualifications.³³⁶ Also, many researchers in the field have criticized current *Shari'ah* board practices in Islamic banks on the grounds that the bank's management pay their salaries and this may influence their *Shari'ah* audit report.

³³⁰ Al Sarhi, M. Lutfi, "The development of the relationship between Islamic banks and the Central Bank in Yemen", *Al-Iqtisad Al-Islami*, Vol.23, No.264, 2003, pp.170-175.

³³¹ The term *Gharar* indicates uncertainty about the thing sold in respect of ability to deliver and quality.

³³² The term *jahalah* indicates a lack of disclosure and transparency.

³³³ Delorenzo, Yusuf Talal, "The religious foundation of Islamic finance", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromony Books and AAOIFI, London, 2004, p. 21.

³³⁴ *Ibid.*, p. 23.

³³⁵ Iqbal, Zamir, "Islamic financial systems", *Finance and Development*, World Bank publication, January 1997, pp. 42-45.

³³⁶ Al-Hassani, Erfan, "Lights on the Islamic finance forum", *Al Khaleej Newspaper*, No. 9090, 8/4/2004, p. 9; and Tlemsani, Issam and Robin Mathews, "Ethical banking: The Islamic view", *Kingston Business School, London*, Available from: <http://business.king.ac.uk/research>, [Accessed on 19 July 2004]

5.11 Conclusion

It appears from the financial analysis presented in the preceding section that Islamic banks in the UAE are also suffering from managerial and regulatory problems,³³⁷ a shortage of expertise in the field of long-term finance, such as *Musharakah* and *Mudarabah*, that requires highly skilled employees, and the lack of secondary capital markets.³³⁸ As a result, small parts of the fundable resources are deployed on the basis of participation.³³⁹ Therefore, efforts must be made and extensive funds made available to finance training programmes, university scholarship and research and development activities.

To overcome the liquidity problem in the UAE Islamic banks, one researcher has proposed that the Islamic security market might provide profitable liquidity assets to replace the inter-bank deposit finance and bridge the gap that exists in the liquidity management of Islamic banks.³⁴⁰

However, Islamic banks might gain credibility by strictly following clear standards, such as the AAOIFI standards and the Basle Accord, while central banks can play a crucial role in providing uniformity for their general practice.³⁴¹ *Shari'ah* board transparency and independence could be proven, as one researcher has proposed, by establishing an independent association, whose main role would be to audit Islamic bank activities and publish reports for their stakeholders.³⁴²

In the following chapters, the empirical study will be presented, including a description of the research methodology and study design, the analysis of the

³³⁷ Warde, Ibrahim, *Islamic finance in the global economy*, Edinburgh University Press, 2000, p.137.

³³⁸ Arrif, Mohammed, "Islamic banking", *Asian-Pacific Economic Literature*, Vol. 2. No. 2, September 1988, pp. 46-62.

³³⁹ Saleh, Nabil A., "Financial transactions and the Islamic theory of obligations and contracts", Chibli Mallat (ed.), *Islamic law and finance*, Graham & Trotman Limited, London, 1988, p. 157.

³⁴⁰ Wilson, Rodney, "The evaluation of the Islamic finance system", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromony Books and AAOIFI, London, 2004, pp. 35-36.

³⁴¹ Wilson, Rodney, "The evaluation of the Islamic finance system", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromony Books and AAOIFI, London, 2004, p. 41; and Al Omar, Fuad and Mohammed Abdel-Haq, *Islamic banking: Theory, practice & challenges*, Zed Books, New Jersey, 1996, pp. 107-119.

³⁴² Wilson, Rodney, "Retail development and wholesale possibilities", Rodney Wilson (ed.), *Islamic finance markets*, Routledge, London, 1990, p.13.

data and the testing of the hypotheses of the study. A discussion of the findings of the study and a number of recommendations will be provided in the final chapter.

Chapter Six

Research Methodology

6.1 Introduction

Although the Islamic banks were able to achieve substantial growth in the last decade, they are now facing increasing competition, both among themselves, as more Islamic banks have been launched in the country, and from the conventional banks with their existing products revolving around interest-based loans and their new products that have been designed to comply with Islamic *Shari'ah*. It would appear that there are only two ways of achieving a steady rate of growth that are open to the emerging market of Islamic banking in the GCC states in general and in the UAE in particular: to improve information technology and to raise the standards of customer service.

The importance of this study stems from its attempt to present a conceptual model to measure the perceived level of service quality in the Islamic banks and to monitor any changes in the customer's attitude towards the service quality that may affect his or her behaviour. In addition, the periodic measuring of the perceived level of service quality will allow the management of those banks to design appropriate and innovative Islamic banking services and products to satisfy their customers' needs.

This chapter presents a review of the methodology used by the researcher, and is divided into eight sections, as follows: Section one will give a brief description of the study problem, along with the questions that have been raised by the researcher; section two will highlight the research hypotheses that are related to the problem, while the third section will shed light on the measuring methodology, and the model developed to measure the perceived service quality in the UAE Islamic banks will be discussed. The fourth section deals with the questionnaire design, while section five will outline the sampling structure that has been chosen by the researcher. In section six, there is a discussion of the data collection procedures and the response rate obtained after the distribution of the questionnaire. Section seven contains an acknowledgement

of the limitations of the study, while section eight presents a brief outline of the content of the forthcoming chapters.

6.2 Research Questions

Islamic banks in the UAE are facing the challenge of retaining their existing customers, while at the same time attracting prospective new customers in order to maintain continuous growth and thereby achieve profits. Another closely related challenge is to continue mobilizing enough funds to finance their long-term investments. The UAE financial market does provide numerous advantages, such as an absence of both trade restrictions and income tax, but it is dominated by a high degree of competition. Competition is the main difficulty which may prevent Islamic banks in the UAE from achieving their strategic goals and overcoming the challenge posed by the large number of conventional banks, including national and foreign banks, operating in the UAE, the total number of which in 2003 was 47 banks with 433 branches. If we take into consideration the fact that the majority of these banks are located in only three major cities (Abu Dhabi, Dubai and Sharjah), we can appreciate the ferocity of competition between banks in this market. The conventional banks recently perceived that by opening Islamic banking windows alongside their original conventional banking products they would satisfy their customers' needs and attract new customers, especially as the Islamic banking windows are approved by well known *Shari'ah* board members.

To maintain an excellent service quality is thus a competitive advantage and a strategic choice for Islamic banks in the UAE to ensure that they are able to compete with their rivals in the market and to achieve their financial goals. The dilemma regarding service quality measurement stems from the lack of standards related to the conceptual framework, in that concepts and definitions relating to the measuring of service quality still need to be applied to different industries and in various environments to reach a reliable and viable model.³⁴³ Despite the small number of studies that have measured the standard of service quality offered by Islamic banks in the region, there is agreement that for the

³⁴³ 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. 407.

Islamic banks to provide an excellent quality of service would neutralize the competition, offer a successful marketing strategy, result in customer segmentation, high financial performance and well-satisfied customers, who in turn would display customer loyalty, and thus enable the banks to retain their customers.

The aim of this study centres on testing the reliability and viability of the proposed model for measuring the perceived service quality of Islamic banks in the UAE. Another aspect of this aim is to examine the level of service quality as perceived by Islamic bank customers in the UAE regarding the quality of the products and services provided by their banks. The study will attempt to provide a clear picture of the actual level of service quality of the UAE Islamic banks from their customers' point of view and possible ways to improve it. It is possible to express the aim of the study in the following research questions:

1. In accordance with the modified SERVQUAL model, what is the current perceived level of service quality of the UAE's Islamic banks?
2. 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?
3. Do the dimensions of service quality contribute equally to the variations in the overall service quality?
4. What are the most influential dimensions in the modified SERVQUAL model on the perceived level of service quality of Islamic banks in the UAE?
5. 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.

6. 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*)?
7. 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?
8. 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?

6.3 Hypotheses of the Study

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.

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.

6.4 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.³⁴⁴

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.³⁴⁵ It also enjoys an acceptable degree of credibility and constancy, with its constancy factor ranging between 87 and 94 per cent.³⁴⁶ Moreover, another researcher supports using the SERVQUAL model to measure service quality for the following reasons:³⁴⁷

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.
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 literature (Othman and Owen, Naser and Montinho, Metawa and Al-Mossawi, Hegazy, Naser et al. and Al-Tamimi and Al-Amiri), 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

³⁴⁴ 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.

³⁴⁵ Zeithaml, Valarie, et al., *Delivering quality service: Balancing customer perceptions and expectations*, New York: The Free Press, 1990, p. 131.

³⁴⁶ 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.

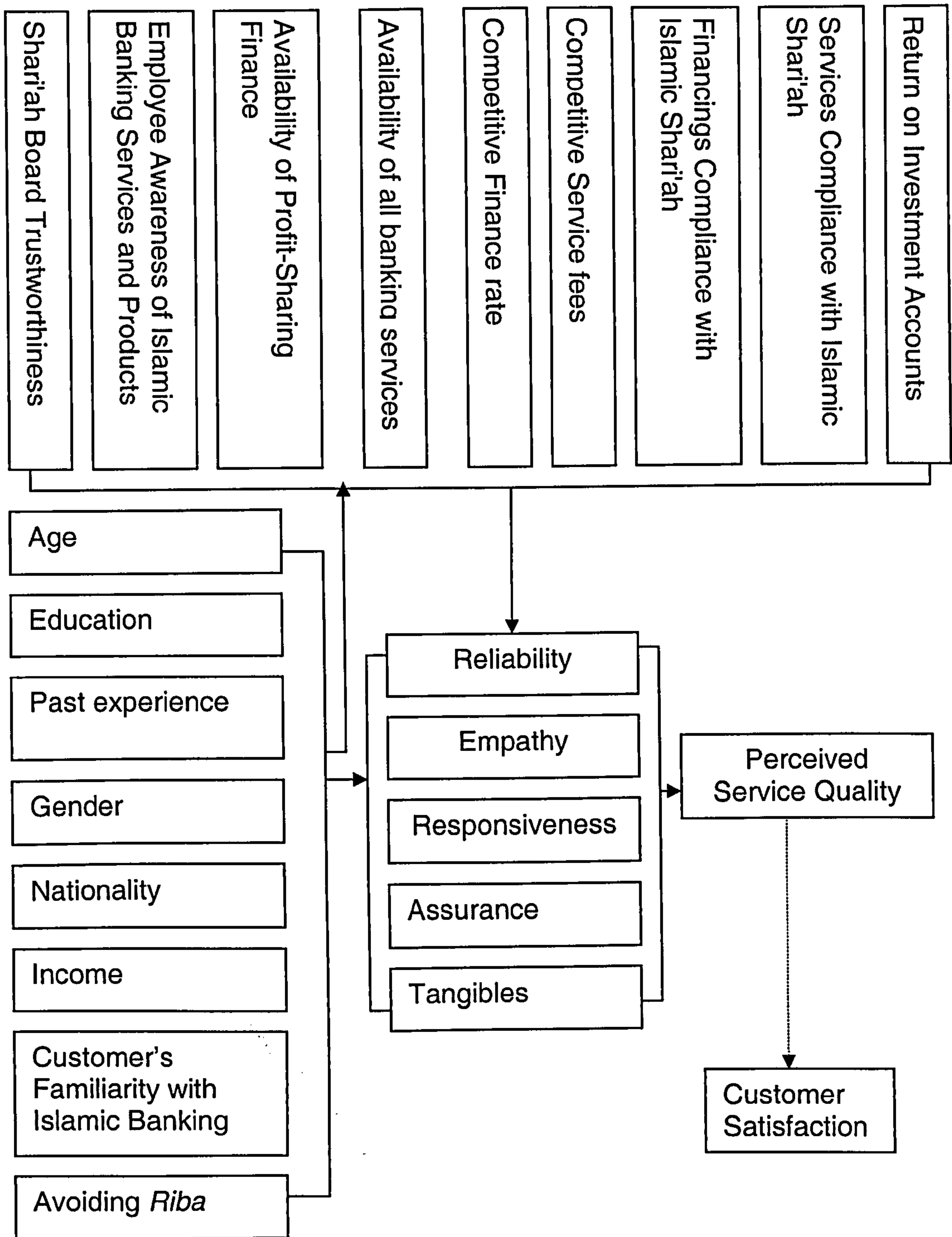
³⁴⁷ Zhu, X. Faye, et al., "IT-Based service and service quality in consumer banking", *International Journal of Service Industry Management*, Vol. 13, No.1, 2002, pp. 69-90.

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.³⁴⁸ Figure 6.1 illustrates the modified model for measuring the perceived service quality of Islamic banks in the UAE.

³⁴⁸ Zeithaml, Valarie, et al., *Delivering quality service: Balancing customer perceptions and expectations*, New York: The Free Press, 1990, p. 131.

Figure 6.1 Measuring the Perceived Service Quality of Islamic banks



The model hypothesized that a higher customer evaluation of Islamic banking variables 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. This assumption is

based on the findings of many studies conducted by researchers in this field, such as Bitner, Balten and Parasuraman et al., details of which may be found in chapter 2. 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 variables, and his perception of service quality in general, that is measured by five dimensions in SERVQUAL.

Accordingly, the proposed model consists of the following variables:

1. The SERVQUAL dimensions which the customer takes into account when assessing service quality are as follows:

- a. Tangibles, which means the extent to which equipment, material and technological facilities, buildings, etc. are available;
- b. Reliability, which refers to the extent to which the organization is capable of fulfilling the promised service in an exact way;
- c. Responsiveness: that is, the extent to which the organization is willing to help customers and offer a quick and excellent service;
- d. 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;
- e. 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.

2. The Islamic banking variables include the extent to which service providers demonstrate the best level of *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.

3. Variables that affect customers' attitudes when they judge service quality include:

- A. The variables of demographic characteristics of customers such as age, education, gender, nationality and income;

- B. The variable of the number of years of dealing with Islamic banks;
- C. The variable of the customer's familiarity with Islamic banking products and services.
- D. The variable of avoiding interest in Islamic bank transactions (*riba*).

6.5 Questionnaire Design

SERVQUAL development studies have recommended that the scale items used to measure service quality dimensions should differ from one industry to another.³⁴⁹ Thus, they have preferred to use the five point LIKERT scale instead of the seven point scale as it reduces the frustration level,³⁵⁰ and does not mislead the customer.³⁵¹ 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.

It should be noted that in overcoming 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.³⁵²

The questionnaire can be found in Appendix B, it 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 (questions 37 and 38 in the

³⁴⁹ 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.

³⁵⁰ Buttle, Francis, "SERVQUAL: Review, critique, research agenda", *European Journal of Marketing*, Vol. 30, Issue 1, 1996, p. 65-75.

³⁵¹ 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.

³⁵² 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; and Buttle, Francis, "SERVQUAL: Review, critique, research agenda", *European Journal of Marketing*, Vol. 30, Issue 1, 1996, p. 65-75.

questionnaire), since overall service quality is clearly defined and interpreted.³⁵³ 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 6.1 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 *Ijarah*, 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.

It should be noted that the questionnaire design follows the model that has been developed by Parasuraman et al., which is discussed in details in chapter 2. To render a summery of the research process, Table 6.2 depicts the research

³⁵³ 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.

questions and the corresponding hypotheses and the corresponding statements from the questionnaire.

Table 6.2 Summary of the research process

Research Questions	Research Hypotheses	Questionnaire Statements
In accordance with the modified SERVQUAL model, what is the current perceived level of service quality of the UAE's Islamic banks?	2	Part 1 (37-38)
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?	1-1, 1-2, 1-3, 1-4, 1-5	Part 1 (1-25)
Do the dimensions of service quality contribute equally to the variations in the overall service quality?	13,15, 18	Part 1 (1-25)
What are the most influential dimensions in the modified SERVQUAL model on the perceived level of service quality of Islamic banks in the UAE?	14, 16, 18	Part 1 (1-25)
What is the relative importance of Islamic banking variables, which include: <i>Shari'ah</i> 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 <i>Shari'ah</i> , Services Compliance with Islamic <i>Shari'ah</i> , Return on Investments Accounts, in forming the perception of the level of service quality provided by the UAE Islamic banks.	11-1, 11-2, 11-3, 11-4, 11-5, 11-6, 11-7, 11-8, 11-9, 12, 13, 14, 17, 18	Part 1 (26-35)
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 (<i>riba</i>)?	3, 14, 16, 17, 18	Part 1 (38)
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?	4, 14, 16, 17, 18	Part 2 (1-15)
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?	5,6,7,8,9,10, 16, 17, 18	Part 3

6.6 Sampling

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 expense³⁵⁴, the study will depend on the sampling method. A simple random sampling of 305 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.³⁵⁵

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 major 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.³⁵⁶ The sample distribution of males and females is illustrated in Table 6.2.

³⁵⁴ Sekaran, Uma, *Research methods for business: A skill-building approach*, Second Edition, John Wiley & Sons, Canada, 1992, p. 227.

³⁵⁵ 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.

³⁵⁶ Economic report, Ministry of Planning of The United Arab Emirates, available from: <http://www.uae.gov.ae/mop/eco-report>, [Accessed on 14 October 2004].

Table 6.3 Sample Distribution According to Percentages of Males and Females in the UAE Population

City	Distributed Sample			Numbers of Males and Females in Sample					
	ADIB	DIB	SIB	ADIB		DIB		SIB	
				M	F	M	F	M	F
Abu Dhabi	15	20	10	10	5	14	6	7	3
Dubai	15	20	10	10	5	14	6	7	3
Sharjah	15	20	20	10	5	14	6	14	6
Ajman	15	20		10	5	14	6		
Ras Al Khaimah	15	20		10	5	14	6		
Fujairah	15	20	20	10	5	14	6	14	6
Al Ain- Abu Dhabi	15	20		10	5	14	6		
Total	105	140	60	70	35	98	42	42	18

6.7 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.³⁵⁷ 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 (305) was 95 per cent, as 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.

³⁵⁷ See Appendix B.

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.

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. The list individuals interviewed and the interview dates can be found in Appendix C.

In analysing the interviews data, a textual approach was used. Accordingly, contextual statements from interviews were used to substantiate the arguments and findings derived from quantitative data analysis.

6.8 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, indicating absolute significance.³⁵⁸

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

³⁵⁸ Sekaran, Uma, *Research methods for business: A skill-building approach*, Second Edition, John Wiley & Sons, Canada, 1992, p. 284.

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.³⁵⁹ Table 6.3 illustrates the reliability test and factors analysis test results related to the study sample.

Table 6.4 Reliability Test and Factors Analysis test of the UAE Islamic Banks Sample

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

6.9 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.

6.10 Conclusion

The research is designed to measure the level of service quality of the UAE Islamic banks. The literature review contained in chapters two and three in

³⁵⁹ Sekaran, Uma, *Research methods for business: A skill-building approach*, Second Edition, John Wiley & Sons, Canada, 1992, p.284.

particular clearly indicates the enormous importance of service quality to business firms in general and to banks in particular. The capability of providing a high level of service quality will certainly enable Islamic banks in the UAE to occupy and maintain their niche in a market characterized by a high level of competition.

The following chapter shall present the empirical results aiming at testing the study's hypotheses.

Chapter Seven

EMPIRICAL ANALYSIS:

Descriptive Analysis and Hypotheses Testing

7.1 Introduction

The causal model used to measure the service quality of the UAE Islamic banks is based on the assumption of the viability and reliability of SERVQUAL dimensions in terms of measuring service quality in businesses. In addition, the model hypothesized that there are variables specific to Islamic banking that affect customer perception of service quality, and these have been used with both the SERVQUAL dimensions and the overall service quality to give a global measure. The SERVQUAL dimensions, overall service quality and Islamic banking variables are in turn influenced by independent variables, including: customers' demographic factors, number of years' experience of banking with an Islamic bank, degree of familiarity with Islamic banking products and services and the customer's desire to avoid engaging in interest-based transactions (*riba*). The model also hypothesized that the interplay of the dependent and independent variables would affect the level of customer satisfaction. The service quality of the UAE Islamic banks was measured by a one-tier SERVQUAL questionnaire which was designed to measure the perceived service quality. A five-point LIKERT scale, was used to measure customer perception of the level of service quality, overall service quality, avoidance of interest (*riba*) and customer familiarity with Islamic banking products and services, while the nominal scale was used to reflect the customer's demographic status and number of years' experience with Islamic banks. The remainder of this chapter is divided into sections and includes reliability and factor analysis tests for each of the dependent variables of the model, a descriptive analysis of the study sample and the variables, and the hypotheses tests.

7.2 Reliability Test of the Questionnaire

A reliability analysis was carried out to test the reliability of the questionnaire used in this study. This analysis showed high questionnaire reliability, since Cronbach's Alpha reached .90 for the items used to measure perceived service quality, .92 for the items used to measure the Islamic banking variables, .80 for the items used to measure overall service quality and .92 for the items used to measure customer familiarity with Islamic banking services and products. Detailed measurements of the reliability are indicated in Table 7.1.

Table 7.1 Reliability test results of the UAE Islamic banks

Variables	Items	Alpha
Tangibles	1,3,4,5	0.81
Reliability	7,8,9,10	0.80
Assurance	12,13,14,15	0.93
Empathy	17,18,19	0.77
Responsiveness	22,23,24,25	0.85
Perceived service quality (SERVQUAL)	1-25	0.90
Islamic banking variables	26-35	0.92
Overall service quality	36-37	0.80
Customer's familiarity	1-15	0.92

7.3 Factor Analysis for the Islamic Banking Variables

Factor analysis is a method of measuring validity, and tests whether the set of dimensional items is sufficient to represent the model well or not.³⁶⁰ Furthermore, the underlying factors that are identified by the factor analysis test explain the degree of variance that exists between the model's variables. Thus, the redundant variables will be reduced. In other words, those items that have a low correlation with their dimension and a high correlation with other dimensions, or which have poor distribution, will be deleted if the factor loading is less than 0.50.³⁶¹

³⁶⁰ Sekaran, Uma, *Research methods for business: A skill-building approach*, Second Edition, John Wiley & Sons, Canada, 1992, p.171.

³⁶¹ 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.

The questionnaire validity regarding the items measuring the Islamic banking variables (26 - 35) was measured by a factor analysis test and the percentage of variance. The results indicate that all the Islamic banking variables loaded high on the SERVQUAL dimensions, all variables recording a significant value above 0.50, and combined accounting for 59.41 per cent of the variance. It may therefore be concluded that all the Islamic banking variables should be retained in the conceptual model. Table 7.2 outlines the statistical results of the factor loading and the variance of the Islamic banking variables.

Table 7.2 Validity measurement of the UAE Islamic banks

Variables	Factor loading	Variance
Shari'ah board trustworthiness	0.63	
Employee awareness of Islamic banking services	0.71	
Availability of profit-sharing finance	0.63	
Availability of all banking services	0.83	
Competitive finance rates	0.85	
Competitive service fees	0.81	
Financings compliance with Islamic Shari'ah	0.85	
Services compliance with Islamic Shari'ah	0.76	
Returns on investments	0.75	
Islamic banking variables		59.41%

7.4 Factor Analysis for the SERVQUAL dimensions

The questionnaire validity regarding the SERVQUAL dimensional items from 1 to 25, which were used to measure the perceived service quality, was measured using loading factors resulting from the factor analysis and the percentage of variance. The results indicate high loading factors for most of the items that measured the five dimensions of perceived service quality, all of them being above 0.50. Table 7.3 shows the factor analysis results for each of the SERVQUAL dimensions, as follows:

1. The loading factor value of most of the items that were used to measure the tangibles dimension was above 0.50 and this result is significant. The only exception was the second item, with a low loading of 0.28, which should be deleted because this value is not significant and therefore the item does not

- represent this dimension perfectly. In total, the tangibles items accounted for 5.89 per cent of the variance of the perceived service quality dimensions.
2. The loading factor values for the items that were used to measure reliability were above 0.50 and these results are significant. The only exception was the first item, with a low loading of 0.41, indicating that it should be deleted, as this value is not significant and does not represent this dimension perfectly. In total, the reliability items accounted for 4.86 per cent of the variance in the perceived service quality dimensions.
 3. The loading factor values for the items that were used to measure assurance were above 0.50 and these results are significant. The only exception was the first item, with a low loading of 0.15. This item should therefore be deleted, as this value is not significant and does not represent this dimension perfectly. In total, the assurance items accounted for 38.62 per cent of the variance in the perceived service quality dimensions.
 4. The loading factor values for the items that were used to measure empathy were above 0.50 and these results are significant. However, there were three exceptions: the first item with a loading of 0.15, the fifth item with a loading of 0.21 and the sixth item with a loading of 0.0064. These items should be deleted as their values are not significant and do not represent the empathy dimension perfectly. In total, the empathy items accounted for 4.34 per cent of the variance in the perceived service quality dimensions.
 5. The loading factor values for the items that were used to measure responsiveness were above 0.50 and these results are significant. In total, the items of responsiveness accounted for 15.53 per cent of the variance in the perceived service quality dimensions.

Table 7.3 Factor analysis of measuring the service quality of Islamic banks in the UAE

Variables	Factor loading	Variance
Tangibles		5.89%
tang1	0.47	
tang2	0.28*	
tang3	0.79	
tang4	0.83	
tang5	0.79	
Reliability		4.86%
rel1	0.41*	
rel2	0.52	
rel3	0.60	
rel4	0.63	
rel5	0.68	
Assurance		38.62%
ass1	0.15*	
ass2	0.84	
ass3	0.86	
ass4	0.80	
ass5	0.85	
Empathy		4.34%
emp1	0.15*	
emp2	0.78	
emp3	0.79	
emp4	0.72	
emp5	0.21*	
emp6	0.0064*	
Responsiveness		15.53%
res1	0.69	
res2	0.69	
res3	0.77	
res4	0.83	

7.5 Descriptive Statistics of the Study Sample

The total number of customers involved in the current study was 286, of which 141 were customers of the Dubai Islamic Bank (DIB), 79 were customers of the Abu Dhabi Islamic Bank (ADIB) and 48 were customers of Sharjah Islamic Bank (SIB).

Descriptive statistics (frequencies and percentages) were used to identify the study sample. The results, shown in Table 7.4, are as follows:

1. There were 182 males and 86 females, representing 67.9 per cent and 32.1 per cent of the total sample respectively.
2. 119 customers were aged between 20 and 30 years and represented 44.4 per cent of the total sample, 104 were aged between 31 and 40 years, representing 38.8 per cent, 26 were aged between 41 and 50 years, representing 9.7 per cent and 13 were aged over 51 years and represented 4.9 per cent.
3. Regarding the customers' educational level, 7 had a doctorate/master's degree, representing 2.6 per cent of the total sample, 108 had a bachelor's degree, representing 40.3 per cent, and 152 had a lower level of education, representing 56.7 per cent.
4. 143 customers were UAE nationals, representing 53.4 per cent of the total sample, and 124 were expatriates, representing 46.3 per cent.
5. Regarding the number of years' experience of Islamic banking among the customers, the study showed that more than 29 per cent had had over five years' experience, while 70 per cent had had less than five years' experience.
6. The study sample included 188 married customers, representing more than 70 per cent of the total sample, while 77 were single, representing 28.7 per cent.
7. The distribution of the study sample according to income shows that the number of customers with an income of less than 3000 AE Dirham was 27, representing 10 per cent of the total, 80 had an income of between 3001 and 5000, representing 30 per cent, 105 had an income of between 5001 and 10000, representing 39 per cent, 36 had an income of between 10001 and 17000, representing 13.4 per cent, and finally, the number of customers with an income of more than 17000 was 17, representing 6.3 per cent.

Table 7.4 Frequencies of the study sample

Variables	Frequencies	Per cent
Gender		
Male	182	67.9%
Female	86	32.1%
Age		
20-30	119	44.4%
31-40	104	38.8%
41-50	26	9.7%
over 51	13	4.9%
Educational level		
Low education	152	56.7%
Bachelor degree	108	40.3%
PhD/master's degree	7	2.6%
Nationality		
UAE National	143	53.4%
Expatriate	124	46.3%
Experience		
Less than 5 years	188	70.1%
More than 5 years	78	29.1%
Marital status		
Married	188	70.1%
Single	77	28.7%
Monthly income		
Less than 3000	27	10.1%
3001-5000	80	29.9%
5001-10000	105	39.2%
10001-17000	36	13.4%
over 17000	17	6.3%

7.6 Descriptive Statistics of Service Quality Model

Descriptive statistics were used to examine the level of service quality as perceived by the customers of Islamic banks in the UAE, the customers' perceptions of the importance of the Islamic banking variables, customer familiarity with Islamic banking services and customers' perceptions of the importance of the avoidance of dealing with interest.

Mean measures were used in this study to measure the central tendency of data that can be used to predict the future demand for products and services, while the standard deviation measure was used to obtain the degree of the

dispersion of data.³⁶² The descriptive statistics results, which include the mean and standard deviation results of the study, are presented in Tables 7.5 to 7.6, and are as follows:

1. On a five-point LIKERT scale, the average response to the statements dealing with the importance of the SERVQUAL dimensions statements, which include the dimensions of tangibles, reliability, assurance, empathy and responsiveness, gave a mean score for the UAE Islamic banks of above 4 points. Thus, customer perception of the level of service quality among all the Islamic banks in the UAE was high, this result being supported by the standard deviation result, which was recorded at 0.52 for all the SERVQUAL dimensions.
2. The mean score of the Islamic banking variables was above 3 points, which indicates that the level of importance of the Islamic banking variables as perceived by the customers was not high and therefore needs to be improved, while the standard deviation was recorded at 0.7 for all the Islamic banking variables
3. Customer familiarity with the services and products provided by the UAE Islamic banks was dealt with using 15 items that were also measured using a five-point LIKERT scale. The results showed that customers are familiar with current accounts, savings accounts, deposits, credit cards, cheque clearance and *Murabahah* finance for vehicles, the mean score for these services and products being recorded as over 3 points. However, the customers showed little familiarity with letters of guarantee, letters of credit, *Murabahah* finance for goods, *Istisna* finance for real estate, *Murabahah* finance for foreign transactions, *Ijarah* finance for services, *Musharakah*, *Mudarabah* and real estate (*Ijarah*), the mean score for these items being 2 points, while the overall standard deviation for all the familiarity items was 0.86.
4. Avoidance of interest was expressed in one item and was also measured on a five-point LIKERT scale. Here, the mean score showed that customers were appraised as 'highly agreeing' with the statement concerning this variable, the standard deviation score being recorded as 0.89.

³⁶² Sekaran, Uma, *Research methods for business: A skill-building approach*, Second Edition, John Wiley & Sons, Canada, 1992, pp. 260-261.

Table 7.5 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

Table 7.6 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 <i>Murabahah</i> finance	3.72	1.21
Goods <i>Murabahah</i> finance	2.72	1.42
<i>Istisna</i> finance	2.179	1.21
Foreign <i>Murabaha</i> finance	2.04	1.17
Service <i>Ijarah</i> finance	2.29	1.23
<i>Musharakah</i>	2.03	1.13
<i>Mudarabah</i>	2.07	1.19
<i>Ijarah</i>	2.03	1.15
Customer's familiarity	2.71	0.86
Avoidance of interest (<i>riba</i>)	4.31	0.89

7.7 Descriptive Statistics across Islamic Banks in the UAE

Descriptive statistics were used to examine the level of service quality in each of the Islamic banks in the UAE as perceived by their customers. This included the perceived service quality, which was measured using the SERVQUAL dimensions, the perceived importance of the Islamic banking variables, the level of customer familiarity with Islamic banking services and the perceived importance of interest avoidance. The descriptive statistical results (mean and standard deviation) on a five-point LIKERT scale are presented in Tables 7.7 to 7.10.

The level of familiarity with Islamic banking products and services was also measured using a five-point LIKERT scale, and the results are illustrated in table 7.8. It can be seen from the table that the customers have an adequate

experience and knowledge of traditional banking services such as current accounts, savings accounts and car finance (which is carried out in Islamic banks via *Murabahah*), but demonstrated a lower level of knowledge regarding most of the other Islamic banking products and services.

The customers' perceptions of the Islamic banking variables, which consist of *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 as reflected in the returns on investment accounts, the availability of banking services and the trustworthiness of the *Shari'ah* board in the Islamic bank, were also measured using a five-point LIKERT scale, and the differences between the Islamic banks' customers were evaluated, as illustrated in Table 7.9, while Table 7.10 illustrates the descriptive statistics for overall service quality across the customers' demographic factors.

Finally, the customers' perception of the importance of the avoidance of interest, or *riba*, was an issue in this study, and the mean value of this factor was above 4 points on the five-point LIKERT scale, which means that avoiding interest-based banking was important to the majority of the customers.

Table 7.7 Descriptive statistics for the study variables across Islamic banks

Variables	DIB		ADIB		SIB	
	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

Table 7.8 Descriptive statistics for customer familiarity and avoidance of interest across Islamic banks

Variables	DIB		ADIB		SIB	
	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
<i>Car Murabaha</i>	3.65	1.26	3.63	1.21	4.04	1.06
<i>Goods Murabaha</i>	2.61	1.33	2.86	1.46	2.81	1.59
<i>Istisna</i>	2.06	1.12	2.34	1.26	2.22	1.34
<i>Foreign Murabaha</i>	1.91	1.05	2.22	1.27	2.08	1.31
<i>Services Ijarah</i>	2.16	1.11	2.24	1.21	2.75	1.50
<i>Musharakah</i>	1.94	1.07	2.15	1.17	2.04	1.25
<i>Mudarabah</i>	2.00	1.15	2.15	1.18	2.12	1.31
<i>Ijarah</i>	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

Table 7.9 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

Table 7.10 Mean value for the customers' demographic factors across SERVQUAL dimensions

Variables	Tangibles	Reliability	Assurance	Empathy	Responsiveness	Overall
Gender						
Male	4	4.1	4	4	3.7	4.2
Female	4.3	4.25	4.2	4.15	3.95	4.45
Marital Status						
Married	4.1	4.1	3.95	4	3.8	4.2
Single	4.2	4.3	4.5	4.2	3.84	4.52
Age						
20-30	4.2	4.3	4.2	4.15	3.8	4.5
31-40	4	4	4	4	3.9	4.1
41-50	4.4	4.2	4	4	4.9	4.1
Over 50	3.84	3.83	3.75	3.7	3.5	4.1
Nationality						
UAE National	4	4.13	4.2	4	3.9	4.3
Expatriate	4.2	4.2	3.94	4.1	3.7	4.3
Education						
Less than high school certificate	4	4.24	5	3.9	4	3.9
High school certificate	3.9	4.1	4.1	4	3.8	4.3
Higher diploma	4.1	4.1	4	4	4.1	4.4
Bachelor degree	4.1	4.1	4.1	4	3.83	4.4
Postgraduate degree	4	4.2	3.8	3.86	3.42	4.14
Income						
Less than 3000	4.43	4.2	4.35	4.25	3.8	4.4
3001-5000	4.2	4.3	4.24	4.2	3.8	4.45
5001-10000	4	4.1	3.97	4	3.8	4.1
10001-17000	4.17	4	4.14	3.9	3.76	4.24
Over 17000	3.74	3.94	3.92	3.8	3.9	4.3
Experience with Islamic banks						
Less than 5 years	4.2	4.2	4	4.1	3.8	4.3
Over 5 years	3.9	4	4.26	4	3.78	4.19

7.8 Hypotheses Testing: Empirical Results

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.

The hypotheses tests are based on the assumption that the confidence level is 0.05, which is generally accepted by social science researchers.³⁶³ 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. Several statistical tests were used to measure the relationship between and the effect of each spectrum of variables on the proposed model. For instance, the Chi-Square test examines the relationship between at least two nominal variables and studies the degree of independence of each variable from the others, while the correlation coefficient, which indicates the strength of the relationship between two variables, is measured using Pearson's correlation, which specifically measures the nature, direction and significance of the bivariate relationships. This is the most popular measure and provides the degree of correlation by way of a matrix. Variance correlation measures the dispersion of data from its mean, and ANOVA is the most popular test for measuring the variance by examining the significant differences that may exist between more than two variables in the model. In addition, a multiple regression analysis has been used in this study to help the researcher to understand the strength of the variance in the dependent variables that is explained by several predictors.³⁶⁴

³⁶³ Sekaran, Uma, *Research methods for business: A skill-building approach*, Second Edition, John Wiley & Sons, Canada, 1992, p. 265.

³⁶⁴ *Ibid*, pp. 266-270.

7.8.1 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.

The analysis of variance (ANOVA) was used to examine the differences in the mean values of dependent variables (the SERVQUAL dimensions) between three groups of customers (DIB, ADIB and SIB). The results are shown in Table 7.11.

Table 7.11 ANOVA analysis of the SERVQUAL dimensions

Variables	Mean			F value	Sig.
	DIB	ADIB	SIB		
Tangibles	4.26	4.39	4.03	3.91	0.02*
Reliability	4.07	4.29	4.21	2.70	0.06
Assurance	4.07	4.02	4.25	1.446	0.23
Empathy	4.21	4.28	3.82	5.298	0.006*
Responsiveness	3.72	3.76	3.94	1.369	0.25
SERVQUAL Dimensions	4.07	4.17	4.06	0.901	0.40

The hypothesis can be recomposed into sub-hypotheses, as follows:

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

The ANOVA analysis showed significant differences between the UAE Islamic banks regarding the tangibles items, where the (f) value is equal to 3.91 and is significant at the level of .02, which is lower than the acceptable confidence level (0.05). Therefore the null hypothesis is rejected and it may be concluded that there are differences in perception between the customers of different Islamic banks regarding the tangibles items as indicators of service quality.

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

The ANOVA analysis showed significant differences between the UAE Islamic banks as regards the empathy items, the (f) value being equal to 5.29 and significant at the level of .006, which is lower than the acceptable confidence level (0.05). Therefore the null hypothesis is rejected and it may be concluded that there are differences in perception between the customers of different Islamic banks as regards the empathy items as indicators of service quality.

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

The ANOVA analysis showed no significant difference between the UAE Islamic banks regarding the assurance items, the (f) value being equal to 1.446 and significant at the level of 0.23, which is higher than the acceptable confidence level (0.05). Therefore, the null hypothesis is accepted and it may be concluded that there are no differences in perception between the customers of different Islamic banks as regards the assurance items as indicators of service quality.

Hypothesis 1-4 H0: There is no significant difference between the UAE Islamic banks as regards the reliability dimension.

The ANOVA analysis showed no significant differences between the UAE Islamic banks as regards the reliability items, the (f) value being equal to 2.70 and significant at the level of 0.06, which is higher than the acceptable confidence level (0.05). Therefore, the null hypothesis is accepted and it may be concluded that there are no differences in the perceptions of customers of different Islamic banks regarding the reliability items as indicators of service quality.

Hypothesis 1-5 H0: There is no significant difference between the UAE Islamic banks as regards the responsiveness dimension.

The ANOVA analysis showed no significant difference between the UAE Islamic banks as regards the responsiveness items, the (f) value being equal to 1.37 and significant at the level of 0.25, which is higher than the acceptable confidence level (0.05). Therefore, the null hypothesis is accepted and it may be concluded that there are no differences in the perceptions of customers of different Islamic banks regarding the responsiveness items as indicators of service quality.

In conclusion, statistical differences in perception between the customers of different UAE Islamic banks regarding the SERVQUAL dimensions do not exist, since for three out of the five SERVQUAL dimensions, these differences were insignificant. This result is supported by the ANOVA test of the SERVQUAL dimensions in total, where the (f) value for the mean score of all the SERVQUAL dimensions was 0.9 and is significant at the level of 0.4, which is higher than the acceptable confidence level (0.05). The first hypothesis is therefore accepted.

Hypothesis 2 H0: There is no significant difference in overall service quality among the Islamic banks in the UAE.

An analysis of variance (ANOVA) was used to examine these differences and the results are shown in Table 7.12. This analysis shows that there is a significant difference in overall service quality between the UAE Islamic banks (DIB, ADIB and SIB), the (f) value being equal to 4.850 and significant at the level of .009, which is lower than the acceptable confidence level (0.05). The second null hypothesis is therefore rejected and it may be concluded that the perceived overall level of service quality varies from one Islamic bank to another in the UAE.

Table 7.12 ANOVA analysis of the differences in the overall service quality of the UAE Islamic banks

Variables	Mean			F value	Sig.
	DIB	ADIB	SIB		
Overall service quality	4.11	4.16	4.77	4.850	0.009

7.8.2 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

Pearson's correlation was used to examine the relationship between the SERVQUAL dimensions and the item regarding avoidance of interest, or *riba*. The results are shown in Table 7.13, and indicate that there is a significant positive correlation between the perceived level of service quality, as measured by the SERVQUAL dimensions, and avoidance of interest (*riba*), the (R) value being equal to 0.27 and significant at the level of .0001, which is lower than the acceptable confidence level (0.05). Accordingly, the third hypothesis is rejected and it may be concluded that a positive relationship exists between the level of importance attached to the avoidance of interest in business transactions and the perceived level of service quality as measured by the SERVQUAL dimensions.

Hypothesis 4 H0: There is no significant relationship between the SERVQUAL dimensions and customer familiarity with Islamic banking products and services.

Pearson's correlation was also used to examine the relationship between the perceived service quality as measured by the SERVQUAL dimensions and the level of customer familiarity with Islamic banking products and services. The results, presented in Table 7.13, show that there is no significant correlation between the perceived service quality and customer familiarity with Islamic banking products and services, the (R) value being equal to 0.03 and significant at the level of .83, which is higher than the acceptable confidence level (0.05). The fourth null hypothesis is therefore accepted and it may be concluded that there is no relationship between the level of customer familiarity with the banks' products and services and the perceived level of service quality in the UAE Islamic banks.

Table 7.13 Pearson's correlation analysis of avoidance of interest and customer familiarity

Variables	R	Significant level
Avoiding dealing with interest	0.27	0.0001*
Customer familiarity	0.03	0.83

Hypothesis 5 H0: There is no significant relationship between the SERVQUAL dimensions and the customer's gender.

A Chi square test was used to study the association between two nominal variables and the interdependency between them. In order to test the fifth null hypothesis, a Chi square test was used to examine the association between the customer's gender and the perceived level of service quality. The results are shown in Table 7.14. The Chi square is equal to 86.454 and is significant at the level of 0.64, which is higher than the acceptable confidence level (0.05). The fifth null hypothesis is therefore accepted and it may be concluded that there is no significant relationship between the gender of the customer and his/her perception of service quality in the UAE Islamic banks.

Table 7.14 Chi Square analysis of the relationship between the dependent variables and the SERVQUAL dimensions

Variables	Chi square	df	Sig.
Gender	86.45	92	0.64
Nationality	107.55	92	0.12
Age	280.82	273	0.35
Educational level	449.12	368	0.002*
Number of years' dealing	97.81	92	0.32
Monthly income	410.56	368	0.06

Hypothesis 6 H0: There is no significant relationship between the SERVQUAL dimensions and the customer's nationality.

A Chi square test was used to examine the association between the customer's nationality and his or her perception of service quality. The results are shown in Table 7.14. The Chi square is equal to 107.55 and is significant at the level of

0.12, which is higher than the acceptable confidence level (0.05). The sixth null hypothesis is therefore accepted and it may be concluded that there is no significant relationship between the customer's nationality and his/her perception of service quality in the UAE Islamic banks.

Hypothesis 7 H0: There is no significant relationship between the SERVQUAL dimensions and the customer's age.

A Chi square test was also used to examine the association between perceived service quality and the customer's age. The results are shown in Table 7.14. The Chi square is equal to 280.82 and is significant at the level of 0.35, which is higher than the acceptable confidence level (0.05). The seventh null hypothesis is therefore accepted and it may be concluded that there is no significant relationship between the customer's age and his/her perception of service quality in the UAE Islamic banks.

Hypothesis 8 H0: There is no significant relationship between the SERVQUAL dimensions and the customer's level of education.

A Chi square test was used to examine the association between the perceived service quality and the customer's educational level. The results are shown in Table 7.14: the Chi square value is equal to 449.12 and is significant at the level of .002, which is lower than the acceptable confidence level (0.05). The eighth null hypothesis is therefore rejected, and it may be concluded that there is a significant relationship between a customer's educational level and his/her perception of service quality in the UAE Islamic banks.

Hypothesis 9 H0: There is no significant relationship between the SERVQUAL dimensions and the customer's number of years' dealing with Islamic banks in the UAE.

A Chi square test was used to examine the association between the perceived service quality and the customer's number of years' dealing with an Islamic bank. The results are shown in Table 7.14: the Chi square value is equal to 97.812 and is significant at the level of .32, which is higher than the acceptable

confidence level (0.05). The ninth null hypothesis is therefore accepted and it may be concluded that there is no significant relationship between a customer's number of years' dealing with Islamic banks and the perception of service quality in the UAE Islamic banks.

Hypothesis 10 H0: There is no significant relationship between the SERVQUAL dimensions and the customer's monthly income.

A Chi square test was also used to examine the association between the perceived service quality and the customer's monthly income. The results are shown in Table 7.14. The Chi square value is equal to 410.56 and is significant at the level of 0.06, which is higher than the acceptable confidence level (0.05). The tenth hypothesis is therefore accepted and it may be concluded that there is no significant relationship between a customer's monthly income and his/her perception of service quality in the UAE Islamic banks.

Hypothesis 11 H0: There is no significant relationship between the Islamic banking variables and the SERVQUAL dimensions.

This hypothesis has been recomposed into sub-hypotheses, and Pearson's correlation was used to examine the conceptual relationship between the Islamic banking variables and the SERVQUAL dimensions. Pearson's correlation test is a non-parametric test and is commonly used to test the bivariate correlation that is useful with the interval scale. The relationship between two variables is either a direct correlation or an inverted correlation; the former produces positive numbers and the latter produces negative numbers, and in both cases the maximum value of the correlation is one, while a zero value means there is no correlation between the variables. Table 7.15 illustrates the results of testing the eleventh hypothesis.

Table 7.15 Pearson's correlation results between Islamic banking variables and SERVQUAL dimensions

Variables	R	Sig.
<i>Shari'ah</i> boards' trustworthiness	0.33	0.0001
Employee awareness of Islamic Banking services	0.47	0.0001
Availability of profit-sharing finance	0.40	0.0001
Availability of all banking services	0.47	0.0001
Competitive finance rates	0.38	0.0001
Competitive service fees	0.43	0.0001
Financings compliance with Islamic <i>Shari'ah</i>	0.50	0.0001
Services compliance with Islamic <i>Shari'ah</i>	0.52	0.0001
Returns on investments	0.44	0.0001

Hypothesis 11-1 H0: There is no significant relationship between the Shari'ah boards' trustworthiness and the SERVQUAL dimensions.

The correlation matrix presented in Table 7.15 shows a high positive correlation between the item dealing with the trustworthiness of the *Shari'ah* boards and the SERVQUAL dimensions, the R value being 0.33 and significant at the level of .0001, which is lower than the acceptable confidence level (0.05). The null hypothesis is therefore rejected and the existence of a relationship between the *Shari'ah* boards' trustworthiness and the SERVQUAL dimensions used in the conceptual model is accepted.

Hypothesis 11-2 H0: There is no significant relationship between employee awareness of Islamic banking services and products and the SERVQUAL dimensions.

The correlation matrix presented in Table 7.15 shows a high positive correlation between employee awareness and the SERVQUAL dimensions, the R value being equal to 0.47 and significant at the level of .0001, which is lower than the acceptable confidence level (0.05). The null hypothesis is therefore rejected and the existence of a relationship between employee awareness of Islamic banking services and products and the SERVQUAL dimensions used in the conceptual model is accepted.

Hypothesis 11-3 H0: There is no significant relationship between the availability of profit-sharing finance and the SERVQUAL dimensions.

The correlation matrix presented in Table 7.15 shows a high positive correlation between the availability of profit-sharing finance and the perceived service quality as measured by the SERVQUAL dimensions, the R value being equal to 0.40 and significant at the level of .0001, which is lower than the acceptable confidence level (0.05). The null hypothesis is therefore rejected and the existence of a relationship between the availability of profit-sharing finance and the SERVQUAL dimensions used in the conceptual model is accepted.

Hypothesis 11-4 H0: There is no significant relationship between the availability of all banking services and the SERVQUAL dimensions.

The correlation matrix presented in Table 7.15 shows a high positive correlation between the item regarding the availability of all banking services and the SERVQUAL dimensions, the R value being equal to 0.47 and significant at the level of .0001, which is lower than the acceptable confidence level (0.05). The null hypothesis is therefore rejected and the existence of a relationship between the availability of all banking services and the SERVQUAL dimensions used in the conceptual model is accepted.

Hypothesis 11-5 H0: There is no significant relationship between competitive finance rates and the SERVQUAL dimensions.

The correlation matrix presented in Table 7.15 shows a high positive correlation between the item regarding competitive finance rates and the SERVQUAL dimensions, the R value being equal to 0.38 and significant at the level of .0001, which is lower than the acceptable confidence level (0.05). The null hypothesis is therefore rejected and the existence of a relationship between the competitive finance rates and the SERVQUAL dimensions used in the conceptual model is accepted.

Hypothesis 11-6 H0: There is no significant relationship between competitive service fees and the SERVQUAL dimensions.

The correlation matrix presented in Table 7.15 shows a high positive correlation between the item regarding competitive service fees and the SERVQUAL dimensions, the R value being equal to 0.43 and significant at the level of .0001, which is lower than the acceptable confidence level (0.05). The null hypothesis is therefore rejected and the existence of a relationship between competitive service fees and the SERVQUAL dimensions used in the conceptual model is accepted.

Hypothesis 11-7 H0: There is no significant relationship between financing compliance with Islamic Shari'ah and the SERVQUAL dimensions.

The correlation matrix presented in Table 7.15 shows a high positive correlation between the item regarding financing compliance with Islamic *Shari'ah* and the SERVQUAL dimensions, the R value being equal to 0.50 and significant at the level of .0001, which is lower than the acceptable confidence level (0.05). The null hypothesis is therefore rejected and the existence of a relationship between financing compliance with Islamic *Shari'ah* and the SERVQUAL dimensions used in the conceptual model is accepted.

Hypothesis 11-8 H0: There is no significant relationship between services compliance with Islamic Shari'ah and the SERVQUAL dimensions.

The correlation matrix presented in Table 7.15 shows a high positive correlation between the item concerning services compliance with Islamic *Shari'ah* and the SERVQUAL dimensions, the R value being equal to 0.52 and significant at the level of .0001, which is lower than the acceptable confidence level (0.05). The null hypothesis is therefore rejected and the existence of a relationship between services compliance with Islamic *Shari'ah* and the SERVQUAL dimensions used in the conceptual model is accepted.

Hypothesis 11-9 H0: There is no significant relationship between the returns on investment accounts and the SERVQUAL dimensions.

The correlation matrix presented in Table 7.15 shows a high positive correlation between the item regarding returns on investments and the SERVQUAL dimensions, the R value being equal to 0.44 and significant at the level of .0001, which is lower than the acceptable confidence level (0.05). The null hypothesis is therefore rejected and the existence of a relationship between the returns on investment accounts and the SERVQUAL dimensions used in the conceptual model is accepted.

Overall, it seems that the eleventh hypothesis must be rejected, and it may therefore be concluded that Pearson's correlation test has proved the existence of a relationship between the Islamic banking variables and the SERVQUAL dimensions that plays a role in the forming of perceptions of service quality in the UAE Islamic banks.

7.8.3 Group Three: Hypotheses to test the effect of the independent variables on the dependent variables in the conceptual model of measuring the perceived service quality of the UAE Islamic banks

Hypothesis 12 H0: the Islamic banking variables do not have an effect on the SERVQUAL dimensions.

A multiple regression analysis was used to predict the causal relationships between the study variables. These relationships show the effect of one independent variable (simple regression), or two or more independent variables (multiple regression), on a dependent variable. The multiple regression analysis was used to determine the effect of the Islamic banking variables on the SERVQUAL dimensions in the proposed model. The results, shown in Table 7.16 are as follows:

- 1- The coefficient of the determination value (R square) of all Islamic banking variables accounted for 0.364 in the variance of the SERVQUAL dimensions, and this value is significant at 0.0001, which is lower than the acceptable confidence level (0.05). Thus, a linear correlation exists between the Islamic banking variables and the SERVQUAL dimensions.
- 2- Services compliance with Islamic *Shari'ah* accounted for 0.264 in the variance of the SERVQUAL dimensions and this value is significant at

0.0001, which is lower than the acceptable confidence level (0.05). Thus, a linear correlation exists between the two variables.

- 3- Returns on investments accounted for 0.035 in the variance of the SERVQUAL dimensions and this value is significant at 0.001, which is lower than the acceptable confidence level (0.05). Thus, a linear correlation exists between the two variables.
- 4- Employee awareness accounted for 0.031 in the variance of the SERVQUAL dimensions and this value is significant at 0.001, which is lower than the acceptable confidence level (0.05). Thus, a linear correlation exists between the two variables.
- 5- Competitive finance rates accounted for 0.013 in the variance of the SERVQUAL dimensions and this value is significant at 0.03, which is lower than the acceptable confidence level (0.05) Thus, a linear correlation exists between the two variables.

Thus, the twelfth null hypothesis is rejected and it may be concluded that the Islamic banking variables have a significant effect on the SERVQUAL dimensions in the proposed model for measuring the perceived service quality of the UAE Islamic banks.

Table 7.16 Multiple regression analysis of the relationship between the Islamic banking variables and the SERVQUAL dimensions

Variables	R ²	F value	Sig.
Employee awareness of Islamic banking services	0.031	10.364	0.001
Competitive finance rates	0.013	4.380	0.03
Services compliance with Islamic <i>Shari'ah</i>	0.264	80.808	0.0001
Returns on investments	0.035	11.259	0.001
Islamic banking variables	0.364	13.782	0.0001

Hypothesis 13 H0: The Islamic banking variables do not have an effect on the overall service quality of the UAE Islamic banks.

A multiple regression analysis was used to examine the effect of these variables on overall service quality. The results, shown in Table 7.17, are as follows:

- 1- The Islamic banking variables accounted for 0.356 in the variance of overall service quality, and this is significant at the level of 0.0001, which is lower

than the acceptable confidence level (0.05). Thus, a linear correlation exists between the two variables.

- 2- Services compliance with Islamic *Shari'ah* accounted for 0.301 in the variance of overall service quality, and this is significant at the level of 0.0001, which is lower than the acceptable confidence level (0.05). Thus a linear correlation exists between the two variables.
- 3- Availability of profit-sharing finance accounted for 0.032 in the variance of overall service quality, and this is significant at the level of 0.001, which is lower than the acceptable confidence level (0.05). Thus, a linear correlation exists between the two variables.
- 4- *Shari'ah* board trustworthiness accounted for 0.012 in the variance of overall service quality, and this is significant at the level of 0.03, which is lower than the acceptable confidence level (0.05) Thus a linear correlation exists between the two variables.

Table 7.17 Multiple regression analysis of the relationship between the Islamic banking variables and overall service quality

Variables	R ²	F value	Sig.
<i>Shari'ah</i> board's trustworthiness	0.012	4.412	0.03
Availability of profit-sharing finance	0.032	11.653	0.001
Services compliance with Islamic <i>Shari'ah</i>	0.301	104.855	0.0001
Islamic banking variables	0.356	14.416	0.0001

In conclusion, according to the results of the multiple regression analysis of the effect of the group of Islamic banking variables on the perceived overall service quality of the UAE Islamic banks (shown in Table 7.17) the thirteenth null hypothesis is also rejected, since the group of Islamic banking variables have a positive multiple regression score of 0.356 (R²) and this is significant at the level of 0.0001, which is lower than the significant value (0.05) accepted in this study. We may therefore reject the hypothesis and conclude that the Islamic banking variables have a significant effect on the perception of overall service quality in 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.

A multiple regression analysis was used to examine the effect of these variables on perceived service quality as measured by the SERVQUAL dimensions. The results are shown in Table 7.18 and are as follows:

1- The Islamic banking variables, avoidance of interest and customer familiarity with Islamic banking products and services accounted for 0.26 of the variance of the SERVQUAL dimensions, and this is significant at the level of 0.0001, which is lower than the acceptable confidence level (0.05) Thus, a linear correlation exists between the two variables.

2- The Islamic banking variables accounted for 0.258 of the variance of the SERVQUAL dimensions, and this is significant at the level of 0.0001, which is lower than the acceptable confidence level (0.05). Thus, a linear correlation exists between the two variables.

Table 7.18 Multiple regression analysis of the relationship between the Islamic banking variables and avoidance of interest and customer familiarity with

Islamic banks

Variables	R ²	F value	Sig.
Islamic banking variables	0.258	70.660	0.0001
Islamic banking variables, avoidance of interest and customer familiarity with Islamic banks	0.26	23.501	0.0001

In conclusion, the results lead to a rejection of the fourteenth null hypothesis, and it may be concluded that the Islamic banking variables, avoidance of interest and customer familiarity with Islamic banking products and services together have a significant effect on the perception of service quality as measured by 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 overall service quality of the UAE Islamic banks.

A multiple regression analysis was used to examine the effect of these variables on the perception of overall service quality. The results are shown in Table 7.19, and are as follows:

- 1- The SERVQUAL dimensions, Islamic banking variables, avoidance of interest and customer familiarity with Islamic banking products and services accounted for 0.496 of the variance of overall service quality, and this is significant at the level of 0.0001, which is lower than the acceptable confidence level (0.05). Thus a linear correlation exists between the two variables.
- 2- Responsiveness accounted for 0.318 in the variance of overall service quality, and this is significant at the level of 0.0001, which is lower than the acceptable confidence level (0.05); thus, a linear correlation exists between the two variables.
- 3- Avoidance of interest accounted for 0.116 in the variance of overall service quality, and this is significant at the level of 0.0001, which is lower than the acceptable confidence level (0.05). Thus a linear correlation exists between the two variables.
- 4- The Islamic banking variables accounted for 0.034 in the variance of overall service quality, and this is significant at the level of 0.0001, which is lower than the acceptable confidence level (0.05); thus a linear correlation exists between the two variables.
- 5- Assurance accounted for 0.014 in the variance of overall service quality, and this is significant at the level of 0.023, which is lower than the acceptable confidence level (0.05); thus a linear correlation exists between the two variables.

Table 7.19 Multiple regression analysis of the relationships between the conceptual model variables and the overall service quality

Variables	R ²	F value	Sig.
Assurance	0.014	5.263	0.023
Responsiveness	0.318	94.178	0.0001
Islamic banking variables	0.034	12.791	0.0001
Avoidance of interest	0.116	41.338	0.0001
SERVQUAL dimensions, Islamic banking variables, avoidance of interest and customer familiarity with Islamic banking	0.496	24.023	0.0001

In conclusion, the fifteenth null hypothesis is rejected and it may be concluded that the SERVQUAL dimensions, Islamic banking variables, avoidance of interest and customer familiarity with Islamic banking products and services have a significant effect on the formation of the perception of overall service quality in 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.

A multiple regression analysis was used to examine the effect of these variables on the SERVQUAL dimensions. The results are shown in Table 7.20, and are as follows:

1. Gender, age, income, education, nationality, experience, avoidance of interest and customer familiarity with Islamic banking accounted for 0.062 in the variance of the SERVQUAL dimensions, and this is significant at the level of 0.12, which is higher than the acceptable confidence level (0.05).
2. Avoidance of interest accounted for 0.036 in the variance of the SERVQUAL dimensions, and this is significant at the level of 0.007, which is lower than the acceptable confidence level (0.05). Thus a linear correlation exists between the two variables.

According to these results, the sixteenth null hypothesis should be accepted, since the multiple regression analysis revealed the fact that, from the dependent group of variables, only avoidance of interest has a significant effect on the SERVQUAL dimensions.

Table 7.20 Multiple regression analysis of the relationship between the dependent variables and the SERVQUAL dimensions

Variables	R ²	F-value	Sig.
Avoiding dealing with interest	0.036	7.552	0.007*
Gender, nationality, age, educational level, number of years' dealing, income, customer familiarity and avoidance of interest	0.062	1.609	0.12

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.

A multiple regression analysis was used to examine the effect of these variables on the Islamic banking variables. The results are shown in Table 7.21.

Table 7.21 Multiple regression analysis of the relationship between the dependent variables and Islamic banking variables

Variables	R ²	F-value	Sig.
Educational level	0.017	4.246	.04
Avoidance of interest	0.134	32.550	.0001
Gender, nationality, age, educational level, number of years' dealing, monthly income, customer familiarity and avoidance of interest	0.162	4.921	.0001

According to table 7.21, the following inferences can be made:

1. Gender, age, income, education, nationality, experience, avoidance of interest and customer familiarity with Islamic banking products and services accounted for 0.162 in the variance of Islamic banking variables, and this is significant at the level of 0.0001, which is lower than the acceptable confidence level (0.05). Thus a linear correlation exists between the two groups of variables.
2. Avoidance of interest accounted for 0.134 in the variance of Islamic banking variables, and this is significant at the level of 0.0001, which is lower than

the acceptable confidence level (0.05). Thus a linear correlation exists between the two variables.

3. Education accounted for 0.017 in the variance of Islamic banking variables, and this is significant at the level of 0.04, which is lower than the acceptable confidence level (0.05). Thus a linear correlation exists between the two variables.

In conclusion, on the basis of the above results, the seventeenth null hypothesis is rejected and it may be concluded that the dependent variables in the proposed model have a significant effect on the Islamic banking variables in the UAE Islamic banks

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.

A multiple regression analysis was used to examine the effect of these variables on the customers' perception of overall service quality. The results, shown in Table 7.22, are as follows:

1. Gender, age, income, education, nationality, experience, avoidance of interest, customer familiarity with Islamic banking, the Islamic banking variables and the SERVQUAL dimensions accounted for 0.505 in the variance of the overall quality of service, and this is significant at the level of 0.0001, which is lower than the acceptable confidence level (0.05) Thus a linear correlation exists between the two variables.
2. The Islamic banking variables accounted for 0.315 in the variance of the overall service quality, and this is significant at the level of .003, which is lower than the acceptable confidence level (0.05). Thus a linear correlation exists between the two variables.
3. Interest avoidance accounted for 0.14 in the variance of the overall service quality, and this is significant at the level of 0.0001, which is lower than the acceptable confidence level (0.05). Thus a linear correlation exists between the two variables.

4. The SERVQUAL dimensions accounted for 0.025 in the variance of the overall service quality, and this is significant at the level of 0.003, which is lower than the acceptable confidence level (0.05). Thus a linear correlation exists between the two variables.

5. Nationality accounted for 0.017 in the variance of the overall service quality, and this is significant at the level of 0.013, which is lower than the acceptable confidence level (0.05). Thus a linear correlation exists between the two variables.

In conclusion, the results show that gender, age, income, education, nationality, experience, interest avoidance, customer familiarity with Islamic banking products and services, the SERVQUAL dimensions and the Islamic banking variables together have a significant effect on the customers' perception of the overall service quality of the UAE Islamic banks.

Table 7.22 Multiple regression analysis of the effect of demographic and personal characteristics on overall service quality

Variables	R ²	F-value	Sig.
Nationality	.017	6.271	.013
Avoidance of interest	.140	49.228	.0001
Perceived service quality	.025	9.146	.003
Islamic banking variables	.315	88.825	.003
Gender, nationality, age, educational level, number of years dealing, monthly income, customer's familiarity, avoidance of interest, perceived service quality and Islamic banking variables	.505	18.806	.0001

7.9 Conclusion

As can be readily seen, the proposed model is characterized by a high degree of reliability; also, the analysis of the model factors reveals high loading factors for both SERVQUAL dimensions and Islamic banking variables.

Hypotheses tests in the UAE Islamic banks model indicate that there is a relationship between the Islamic banking variables, SERVQUAL dimensions

and the overall service quality that affects the level of customer satisfaction. The study results also show that the customers' perceptions of UAE Islamic banks are affected by independent factors such as age, level of education, number of years' experience with the Islamic bank, the desire to avoid dealing with interest-based banks and familiarity with Islamic banking products and services.

The next chapter focuses on a discussion of the study's findings and possible solutions to the emerging difficulties that are currently facing Islamic banks in the UAE.

Chapter Eight

Discussing the Empirical Results

8.1 Introduction

Many factors are responsible for the rapid changes taking place in the banking services of the UAE Islamic banks. These include changes in the financial and investment needs of customers, cost-effectiveness and technology, the requirements of new business potentials and regulation processes and the diversification of banking activities into such areas as trading, leasing and infrastructure finance.

Improvements in service will lead to increased customer satisfaction, which will in turn increase the banks' ability to retain their customers, broaden their market share and increase profitability.³⁶⁵ In this regard, all the chief executive officers of the UAE Islamic banks who were interviewed for this study agreed that improving the quality of service is the key way to overcome the severe competition in the UAE banking market.³⁶⁶

In addition, good service quality gives valuable returns, including repeat business, positive customer referrals and increased profits. It also results in strengthened management practice, which may include the enhancement of employees' morale, the development of a service quality culture and the enhancement of productivity and communication within the company. Furthermore, the continuous assessment of service quality has many benefits, such as supplying the proof of a need for quality programmes and pinpointing

³⁶⁵ Rust, Roland T., et al., "Return on quality at Chase Manhattan Bank", *Institute for Operations Research and the Management Sciences*, March-April, 1999, pp. 62-72.

³⁶⁶ Structured interview with Mr. Saad Abdul Razzaq, Chief Executive Officer, Dubai Islamic Bank, Dubai, 6 December 2004; and Structured interview with Mr. Saeed Al Qamzi, General Manager, Sharjah Islamic Bank, Sharjah, 8 May 2005; and Al Shared, Saeed, "The UAE Islamic banks", *Al Khaleej Al Eqtisady*, Al-Khaleej Arabic Newspaper, UAE, No. 9568, 30 July 2005, p. 3.

the areas that would benefit from it, providing a baseline for future measurement and building management support and action plans.³⁶⁷

There follows an in-depth discussion of the findings of this study and its descriptive analysis and hypotheses tests. In addition, the difficulties experienced by Islamic banks in the UAE will be discussed and various possible methods of overcoming some of these difficulties will be highlighted.

8.2 Discussion the Findings

Zeithaml, Boulding, Freeman and Dart, Robinson and Pidd and Babakus and Boller all argue that the five dimensions of SERVQUAL are generic and that the number of dimensions differs depending on the nature of the service.³⁶⁸ Therefore, in order to measure the quality of service offered by the UAE Islamic banks, another group of influential variables pertaining to Islamic banking and reflecting their singularity was added. In order to test the hypotheses concerning the proposed model of measuring service quality in the UAE Islamic banks, 300 questionnaires were distributed to UAE Islamic bank customers, 268 of which were completed.

The questionnaire items reflected high reliability, with the SERVQUAL dimensions reaching 90 per cent, and the Islamic banking variables reaching 92 per cent; this means that the composition of the proposed model as a whole was characterized by high reliability and is therefore quite suitable to measure the perceived level of service quality offered by Islamic banks in the UAE.

The customers' attitudes towards the service quality offered by Islamic banks can be used to assess the level of service quality, the mean score of the service quality dimensions being considered the level of service quality.³⁶⁹ The level of service quality encountered by the customer then determines the level of

³⁶⁷ 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, p. 90.

³⁶⁸ Robinson, Stewart, "Measuring service quality: Current thinking and future requirements", *Marketing Intelligence & Planning*, Vol. 17, No. 1, 1999, pp. 21-32.

³⁶⁹ Ibid.

customer satisfaction.³⁷⁰ On these grounds, the descriptive analysis showed that the level of service quality offered by the UAE Islamic banks as it is perceived by their customers was high, and recorded a 4 point mean value on a five-point LIKERT scale. The study also showed that the perception of the customers regarding the Islamic banking variables was also high and recorded a 3.76 mean value on the five-point LIKERT scale.

8.3 The Importance of Islamic Banking Variables

The factor analysis test shows that the Islamic banking variables load was above 59 per cent in the conceptual model that was proposed to measure the perceived service quality offered by the UAE Islamic banks. This result is considered high and means that each of the Islamic banking variables in the proposed model is very important in the formation of the customers' perceptions of the UAE Islamic banks regarding the level of service quality offered by each bank.

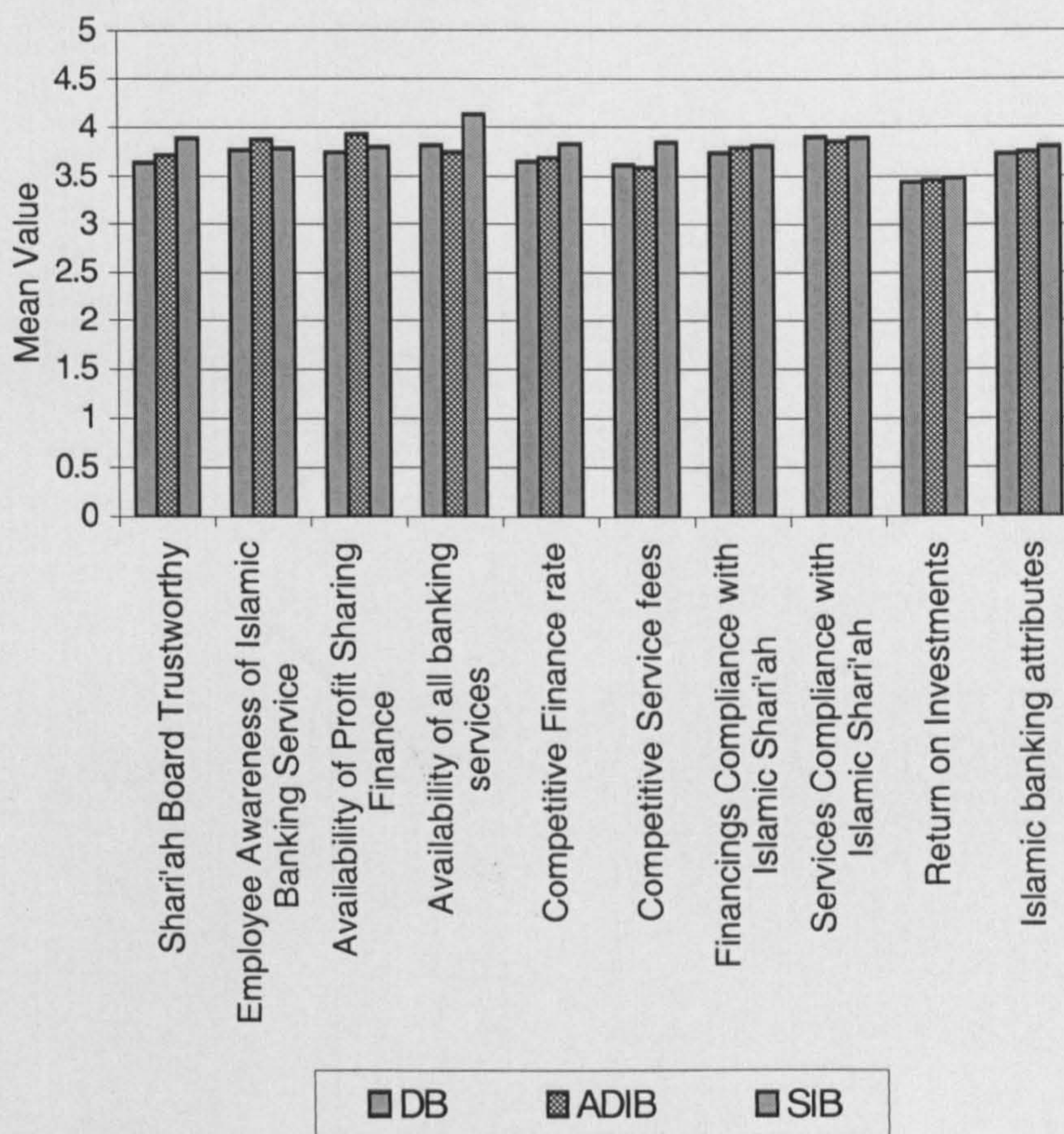
This result is in harmony with the mean test result of customers' perceptions of the Islamic banking variables, which was above 3.5 points on the five-point LIKERT scale. As a result, the study proved that the Islamic banking variables are critical and pivotal pillars in the formation of customers' attitudes towards service quality in the UAE Islamic banks, and their judging of the level of service quality in general. Figure 8.1 shows the importance of the Islamic banking variables.

Figure 8.1 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.

³⁷⁰ Philip, George and Shirley-Ann Hazlett, "The measurement of service quality: A new P-C-P attributes model", *International Journal of Quality and Reliability*, Vol. 14, No. 3, 1997, pp. 260-286.

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.³⁷¹ 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.³⁷²

Figure 8.1 Importance of Islamic banking variables



³⁷¹ Al Gaoud, L. M. and Mervyn K. Lewis, "Corporate governance in Islamic banking: The case of Bahrain", 1999.

³⁷² 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.

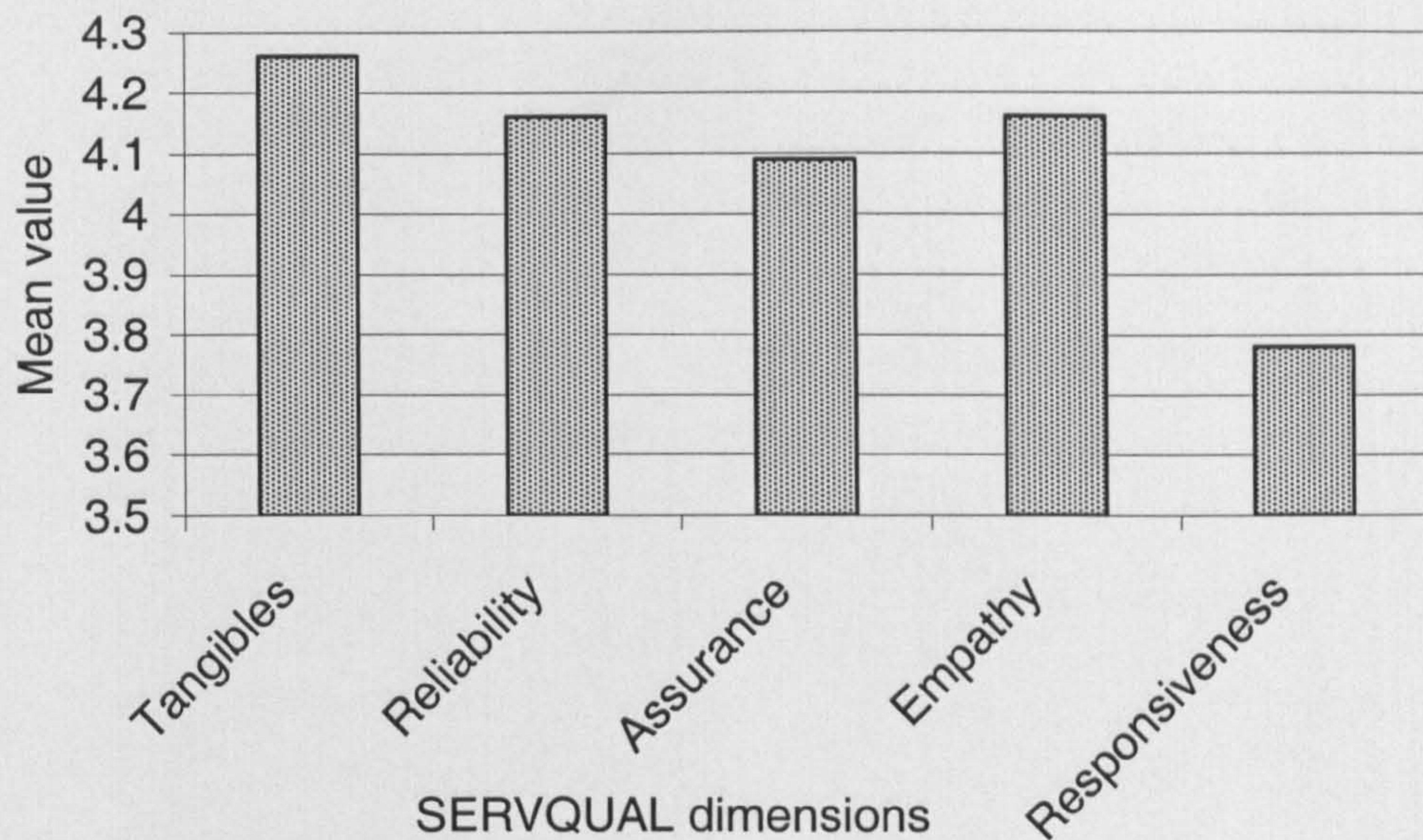
8.4 The Importance of the SERVQUAL Dimensions

The study results show that the SERVQUAL dimensions are very important in the constitution of customers' perceptions of service quality in the UAE Islamic banks, since the factor analysis of the SERVQUAL dimensions shows that the loading factor values for the items that were used to measure SERVQUAL dimensions were above 0.50 and these results are significant. In addition, the mean value of the SERVQUAL dimensions shows the importance of some of the dimensions from the point of view of the customers.

As can be seen from Figure 8.2, 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., Wuhrrer, Angur and Al-Tamimi and Al-Amiri,³⁷³ 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.

³⁷³ Zeithaml, Valarie, et al., *Delivering quality service: Balancing customer perceptions and expectations*, New York: The Free Press, 1990, p. 28; and Wuhrrer, 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, Hassen 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.

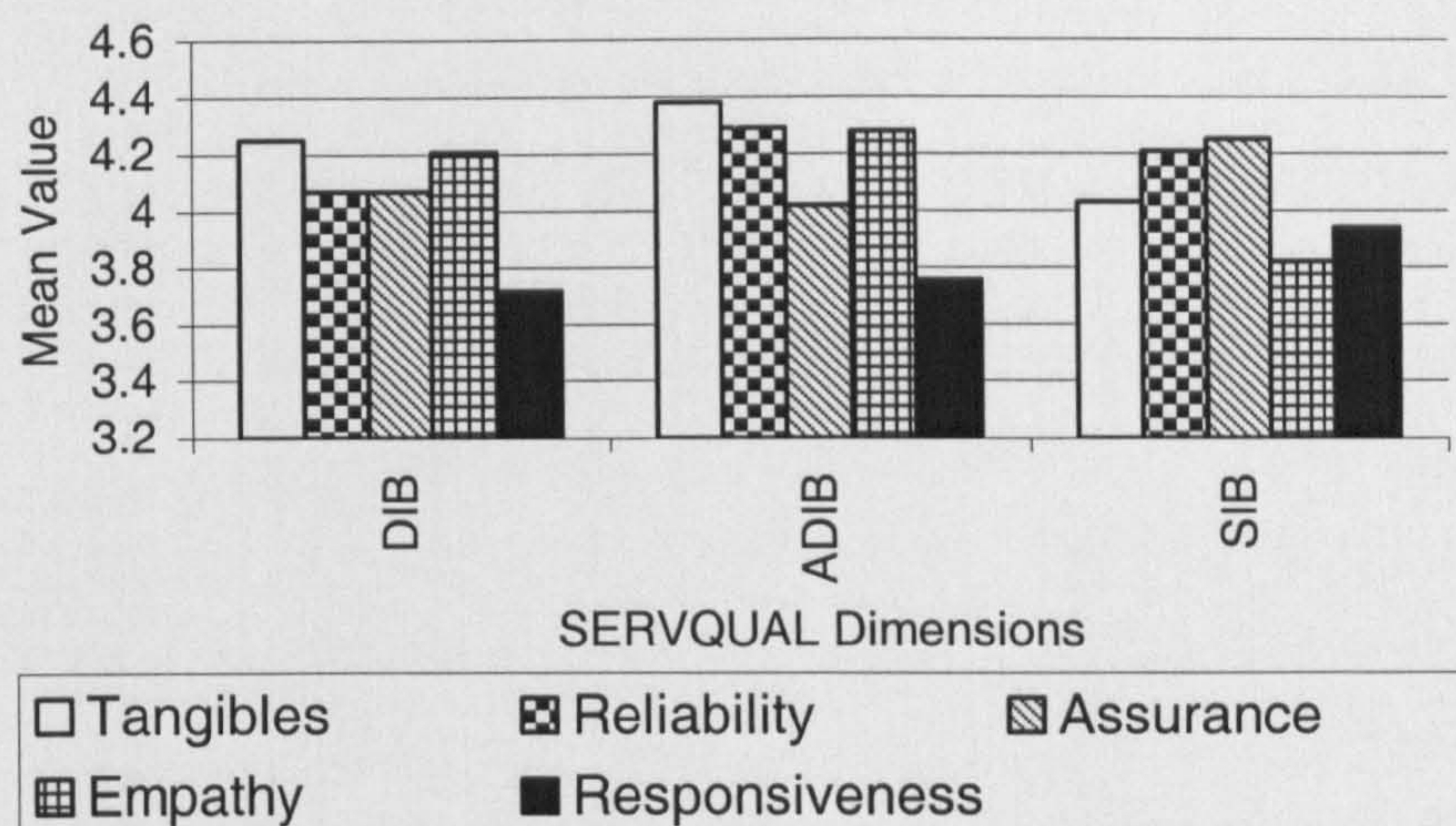
Figure 8.2 Importance of the consolidated SERVQUAL dimensions



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.

As may be clearly seen from Figure 8.3, the customers of the Dubai and Abu Dhabi Islamic Banks are highly appreciative of the tangibles, empathy and reliability aspects of the service, while they seem not so highly appreciative of the assurance and responsiveness aspects. Thus, the management of these two banks must consider providing state-of-the-art equipment, materials, technology and buildings, while they must also be seen by their customers as being able to provide the promised services in an exact way, and as showing a personal interest in their customers by trying to understand their needs and putting themselves in their place.

Figure 8.3 Importance of SERVQUAL dimensions in each Islamic bank



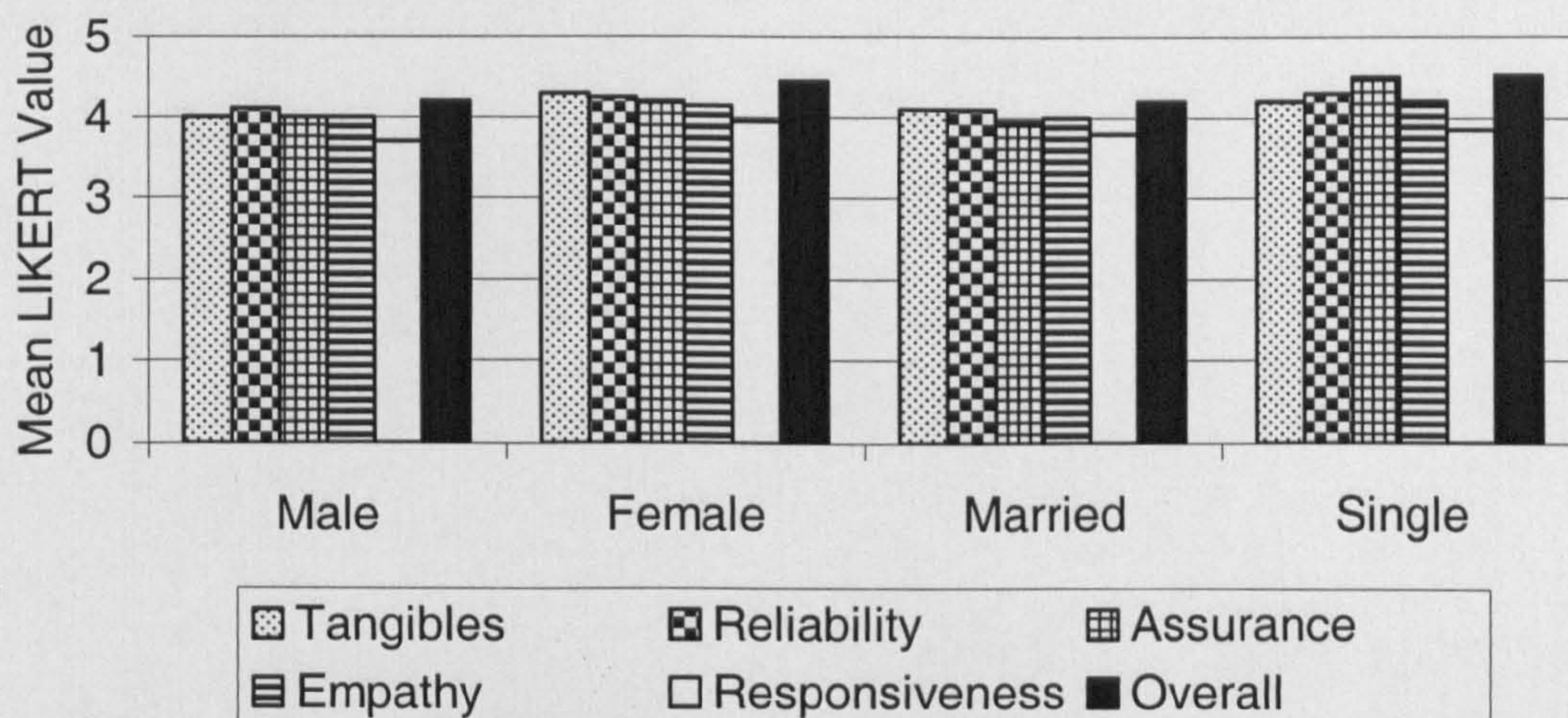
Interestingly, Figure 8.3 illustrates that Sharjah Islamic bank customers are highly appreciative with regard to the dimensions of assurance, reliability and tangibles, while they have not rated the banks very highly for responsiveness and empathy. The management should, therefore, make sure that the bank's employees possess the knowledge and skill necessary to retain the customers' confidence and make them feel secure, in addition to providing state-of-the-art equipment, materials, technology and buildings, and being able to provide the promised services in an exact way.

To be precise, 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.

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 customers' attitudes towards the importance of the SERVQUAL dimensions and their overall judgement of the service quality of the UAE Islamic banks vary according to demographic factors.

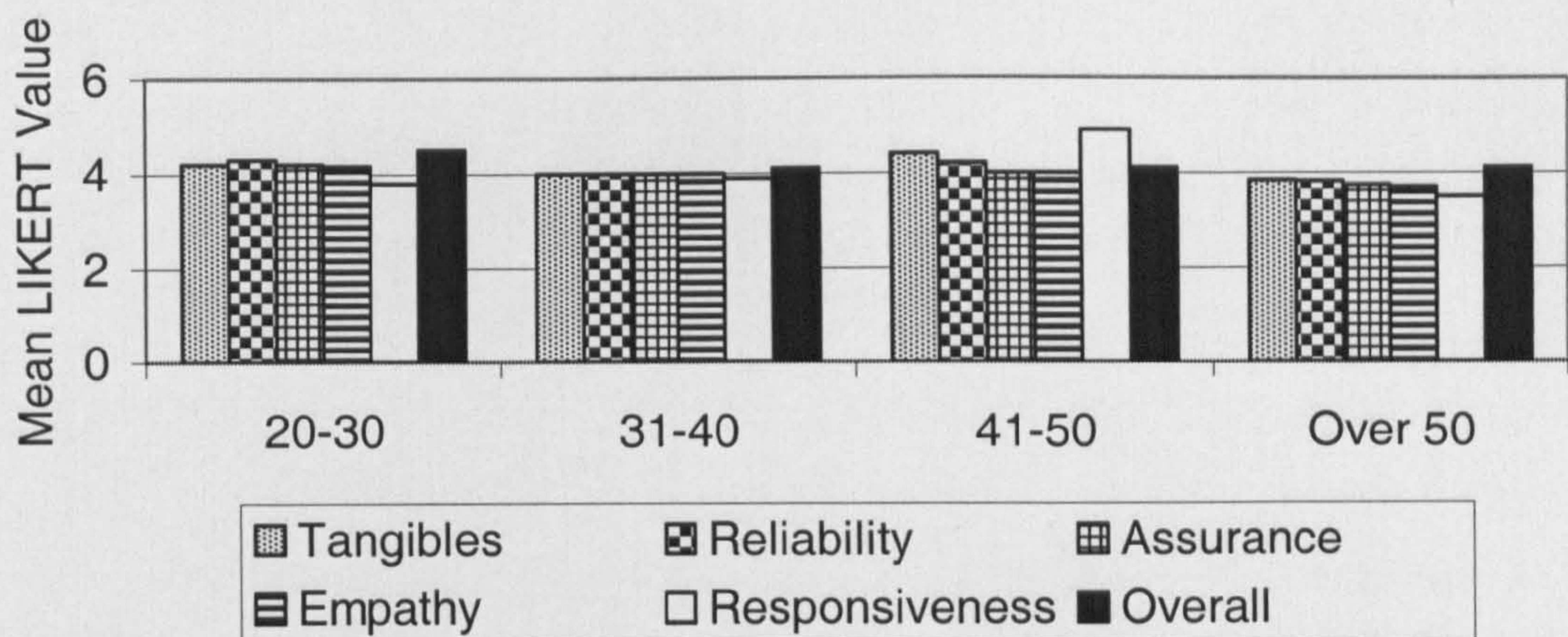
In this regard, male customers have a high appreciation of reliability items such as performance accuracy and service availability, while, by contrast, female customers consider tangible items, which include modern machines and interior décor, as being more important. Concerning customers' marital status, 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 8.4 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 8.4 Importance of SERVQUAL dimensions across customers' gender and marital status



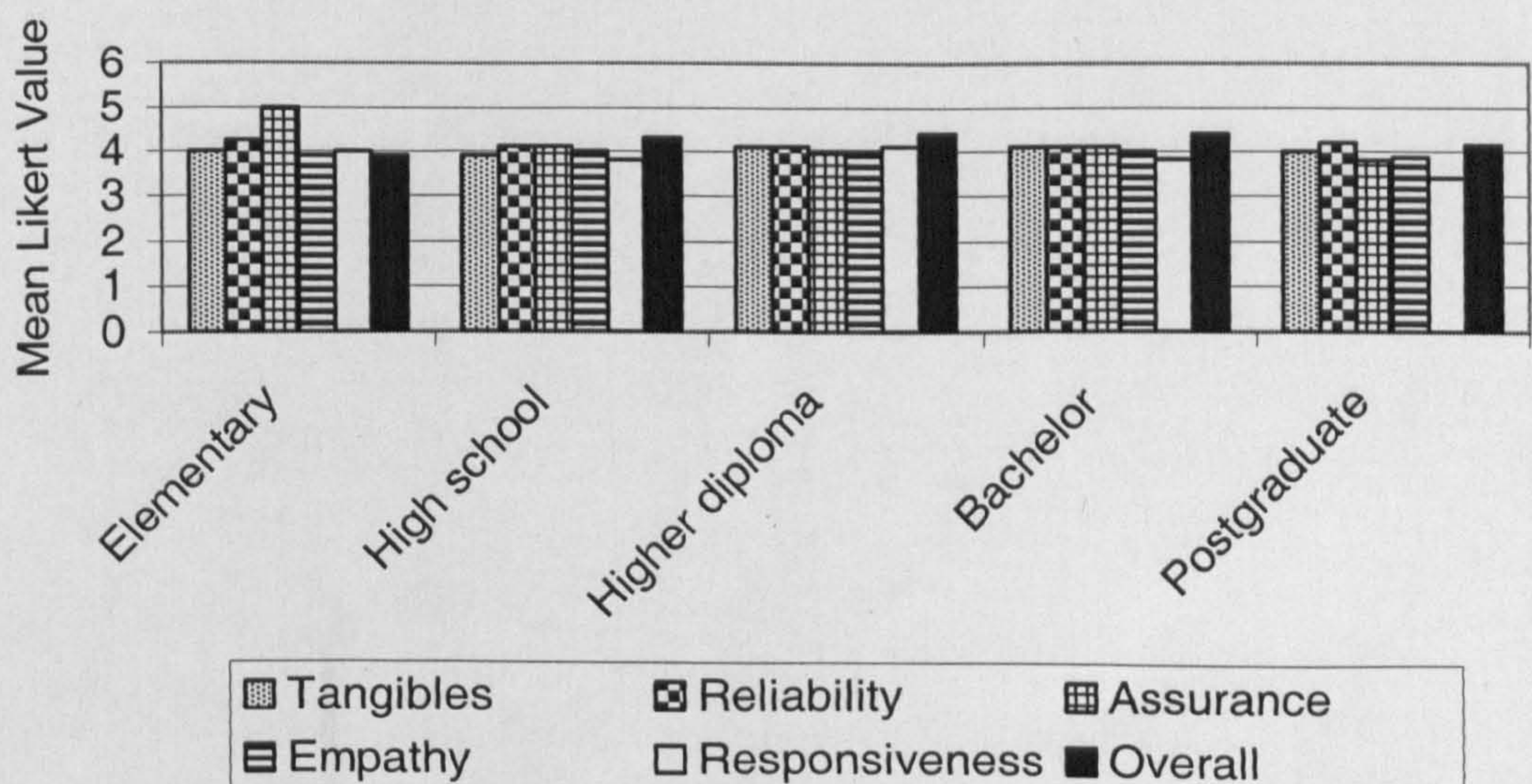
Similarly, with regard to customers' ages, young customers in the age range between 20 and 30 have a high appreciation of reliability items, customers aged between 31 and 40 appreciate all service quality dimensions, customers between the ages of 41 and 50 assign a high importance to responsiveness, 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 20 to 30 have a greater appreciation of the SERVQUAL dimensions, it is thus recommended that the banks promote a high quality of service for other age groups.

Figure 8.5 Importance of SERVQUAL dimensions across customers' ages



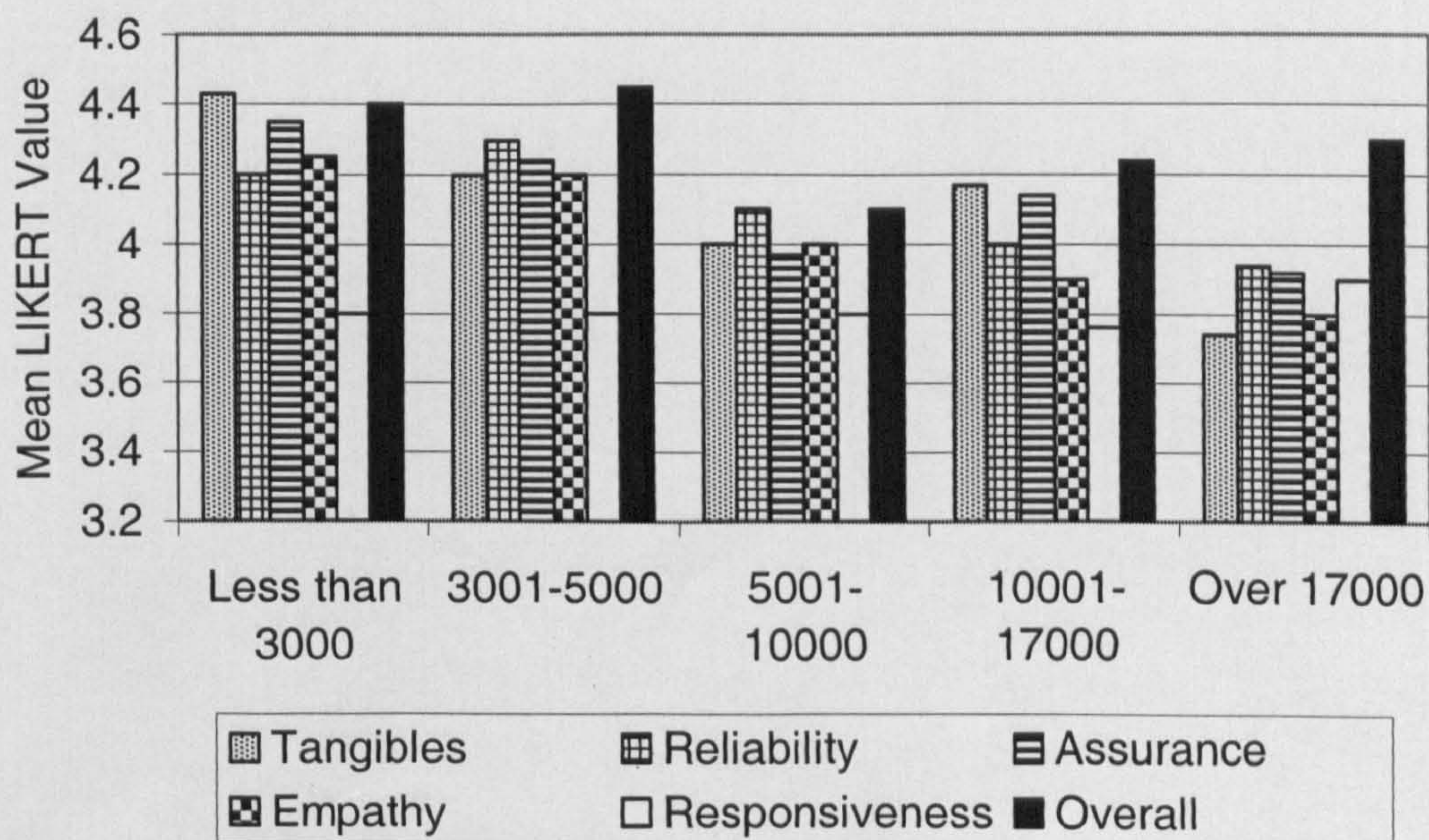
Equally, it seems from Figure 8.6 that the education of the UAE Islamic banks' customers plays a highly significant role in forming their perception of service quality. For example, illiterate customers do not have much interest in advanced technology, and therefore prefer the assurance dimension, which 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 8.6 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 8.7. 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.

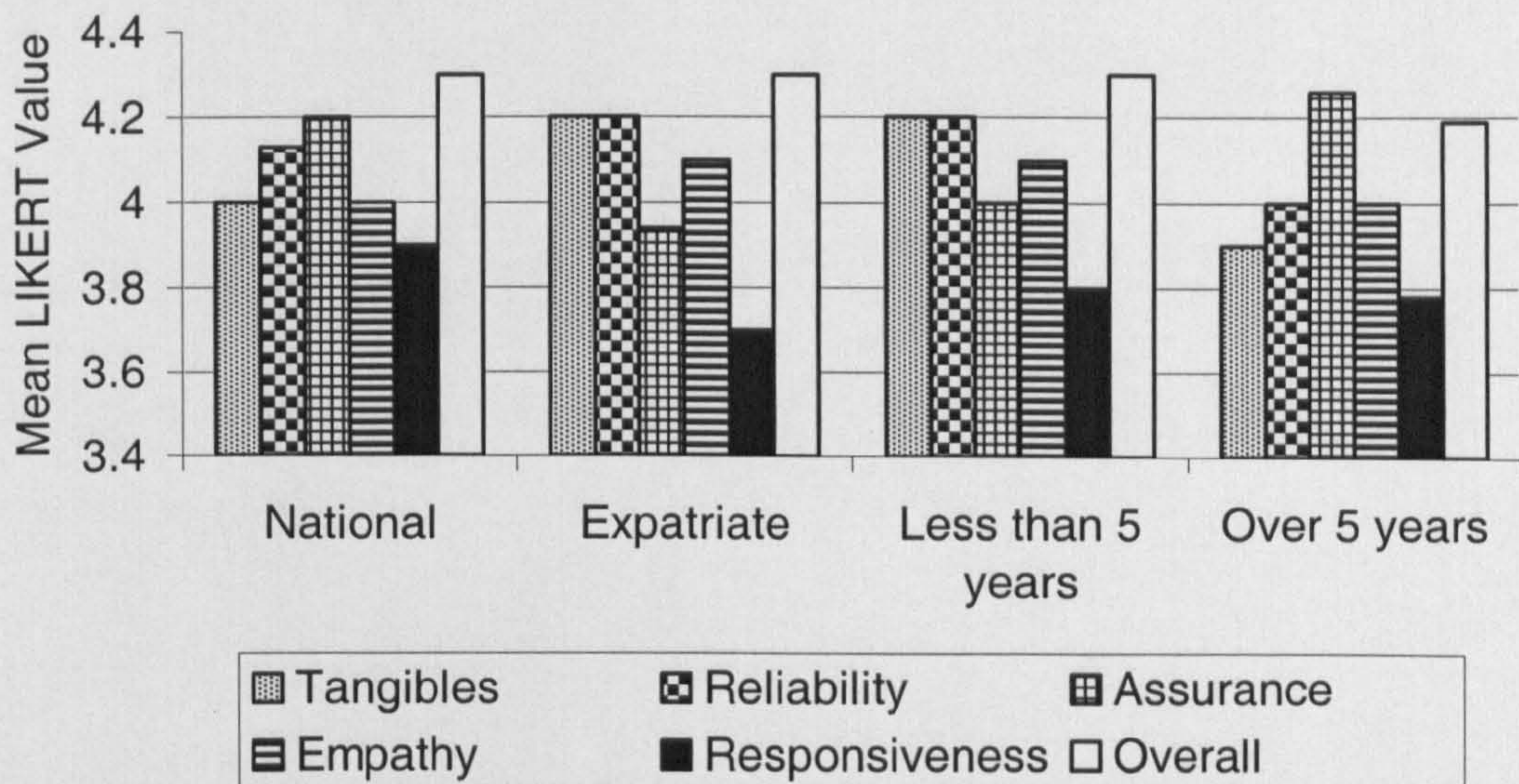
Figure 8.7 Importance of SERVQUAL dimensions across customers' monthly income



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 perceive overall service quality as high.

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 8.8 Importance of SERVQUAL dimensions across customers' nationality and experience of dealing with Islamic banks



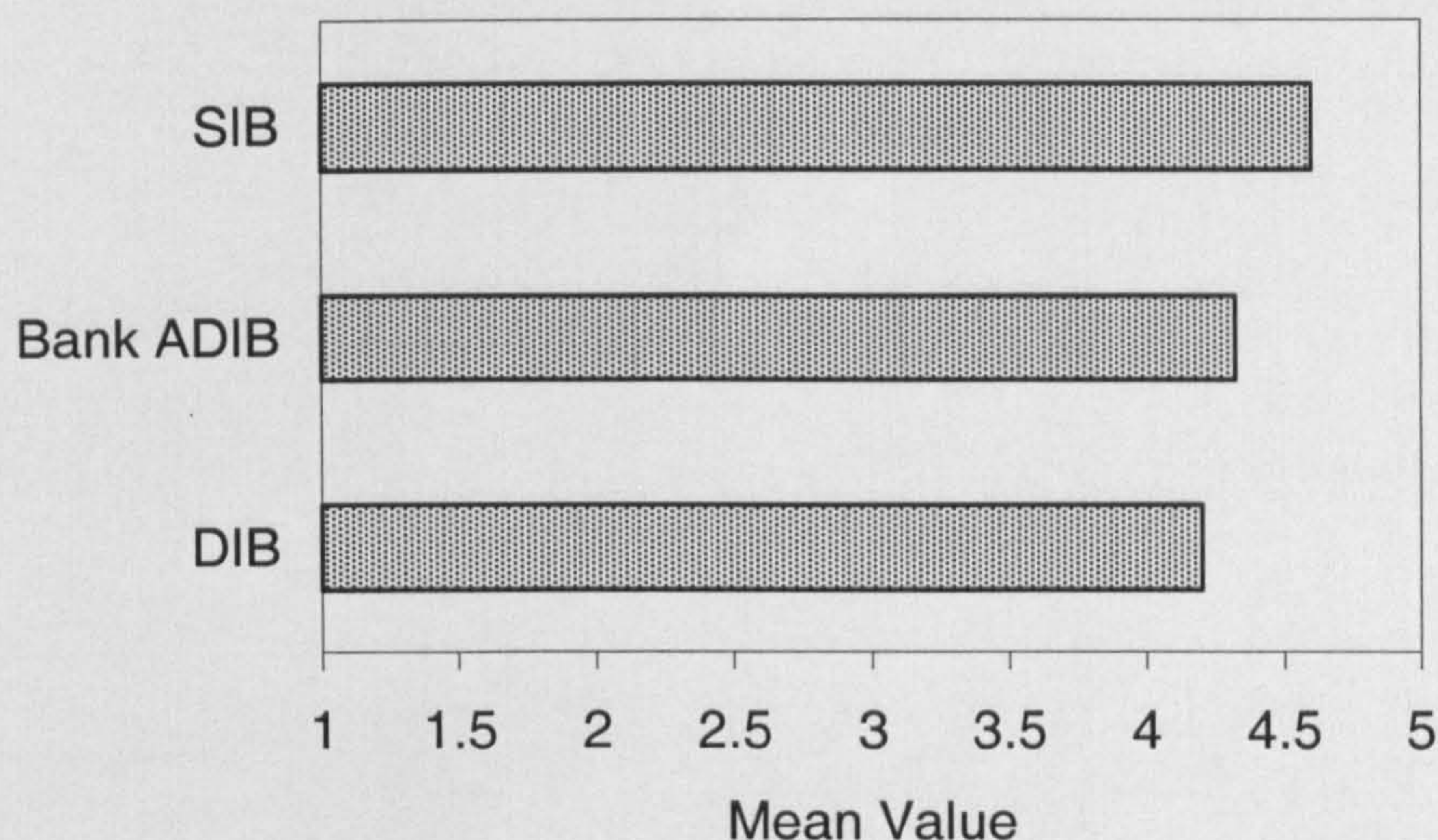
In conclusion, in a market characterized by pure competition, the customers' preferences relating to service quality dimensions are a competitive advantage and can be used as a basis of customer segmentation in the UAE Islamic banks, based on customer homogeneity or service quality dimensions groups. In addition, service quality programmes may be built on the basis of customers' attitudes towards each of service quality dimensions, and these programmes should be designed to deal with any weaknesses in those items related to dimensions that are preferred or appreciated by customers. This in turn reflects the well known marketing concept which is based on determining the needs of the market and satisfying them in an effective and efficient way.

8.5 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. Figure 8.9 sheds light on this result.³⁷⁴

Figure 8.9 The importance of avoiding *riba*



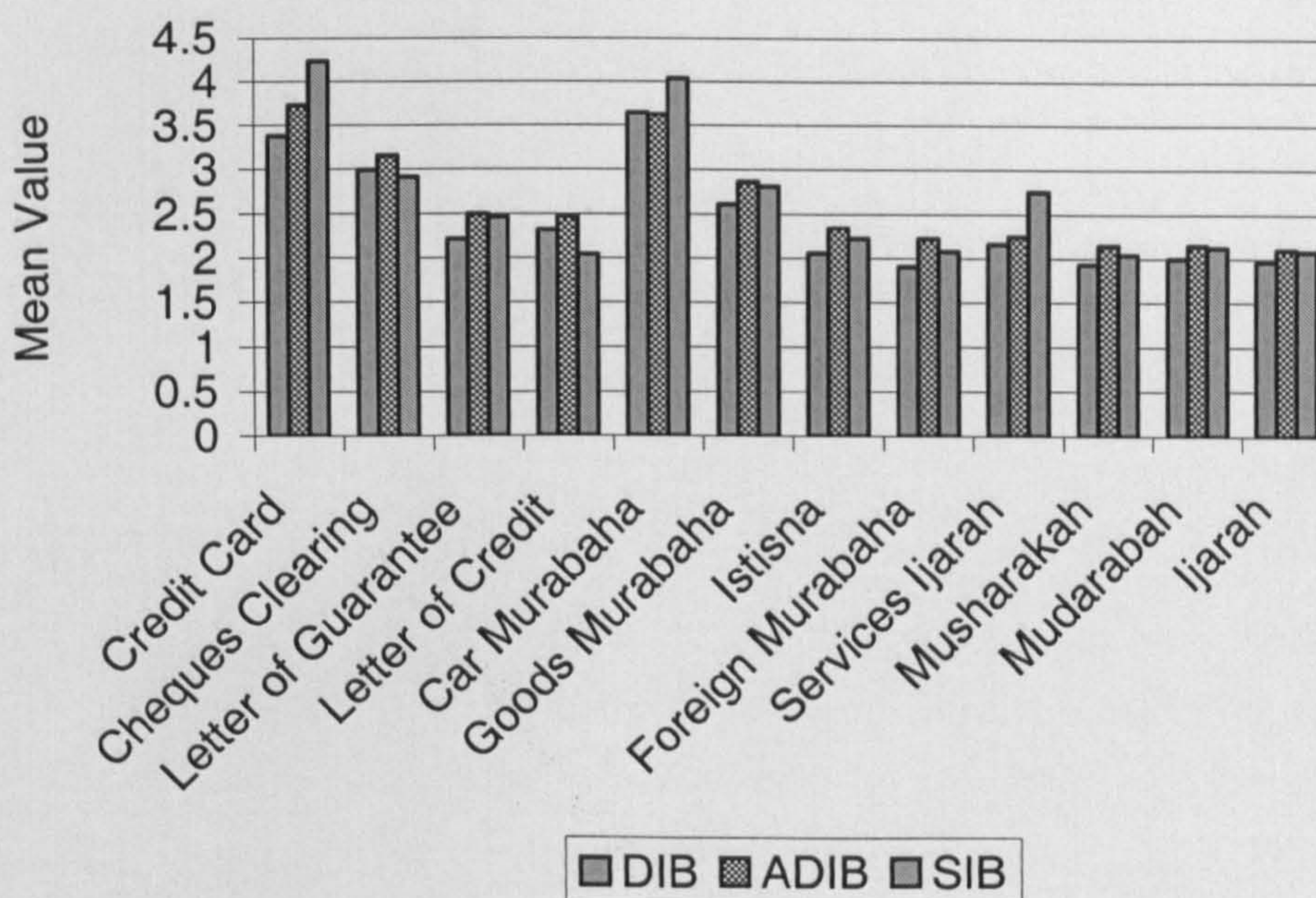
As a result, it is highly recommended that the UAE Islamic banks include their commitment to avoiding *riba* in their mission statement as a strategic goal; the mission statement should also be clearly announced and brought to the notice of the customers in order to uphold the relationship of trust between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

³⁷⁴ 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: <http://www.islamic-finance.net/journal.html>, [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.

8.6 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 8.10 illustrates the mean values of customer familiarity with the UAE Islamic banking products and services.

Figure 8.10 Level of customer familiarity with Islamic banking services and products



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.³⁷⁵

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.³⁷⁶

8.7 The Differences among the Demographic Factors of the UAE Islamic Banks Customers

The examination of customers' demographic factors revealed that 45 per cent of all customers of Islamic banks in the UAE are relatively young, their average age being between 20 and 30; 40 per cent are adults, their average age being between 31 and 40, and 10 per cent were aged between 41 and 50, while only 5 per cent were aged over 50. The survey showed that 57 per cent of the total number of respondents hold qualifications lower than a university degree and 43 per cent hold higher education degrees. Also, the study demonstrated that Islamic banks in the UAE have succeeded in attracting many expatriates, who represent 46 per cent of the total, while nationals represent 54 per cent. The sample distribution according to monthly income indicated that 84 per cent of the UAE Islamic banks' customers earn an average monthly income, while only

³⁷⁵ 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.

³⁷⁶ Structured interview with Mr. Saad Abdul Razzaq, Chief Executive Officer, Dubai Islamic Bank, Dubai, 6 December 2004.

10 per cent earn a low income and 6 per cent earn a high income. This result indicates that the majority of customers are clerks, craftsmen, teachers and from middle management. Intensive marketing efforts are therefore required from the UAE Islamic banks to attract those from senior management and other wealthy persons, who currently represent only 6 per cent of the clients surveyed. Furthermore, special products and service schemes suited to low income customers should be developed, as currently they represent only 10 per cent of the total number of customers. This result is in line with other studies conducted by Parasuraman et al., Dabholkar et al., Wakefield, Boldgett and Jamal and Naser³⁷⁷, who found that customers' education was an extremely important variable which had a significant effect on how Islamic bank customers perceived service quality.³⁷⁸ Figures 8.11 to 8.16 illustrate the descriptive analysis of the demographic factors of the customers of the UAE Islamic banks.

Figure 8.11 Age

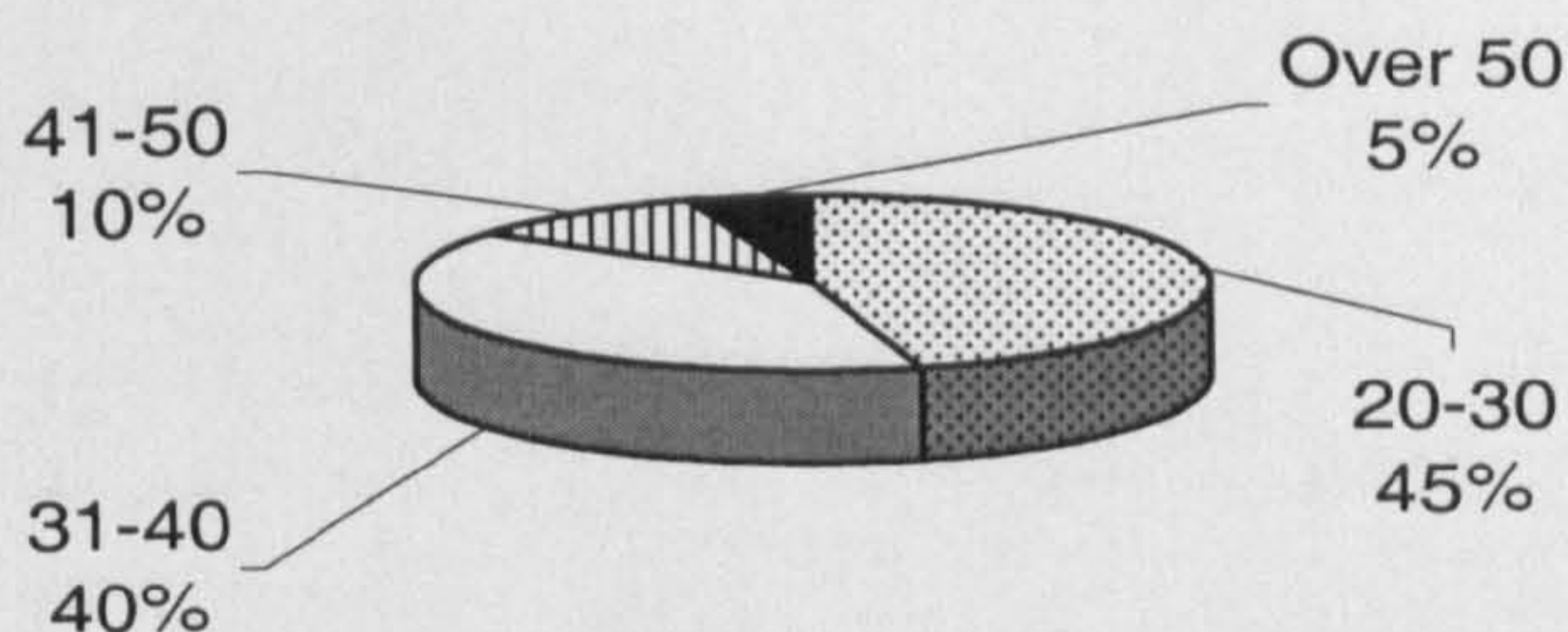
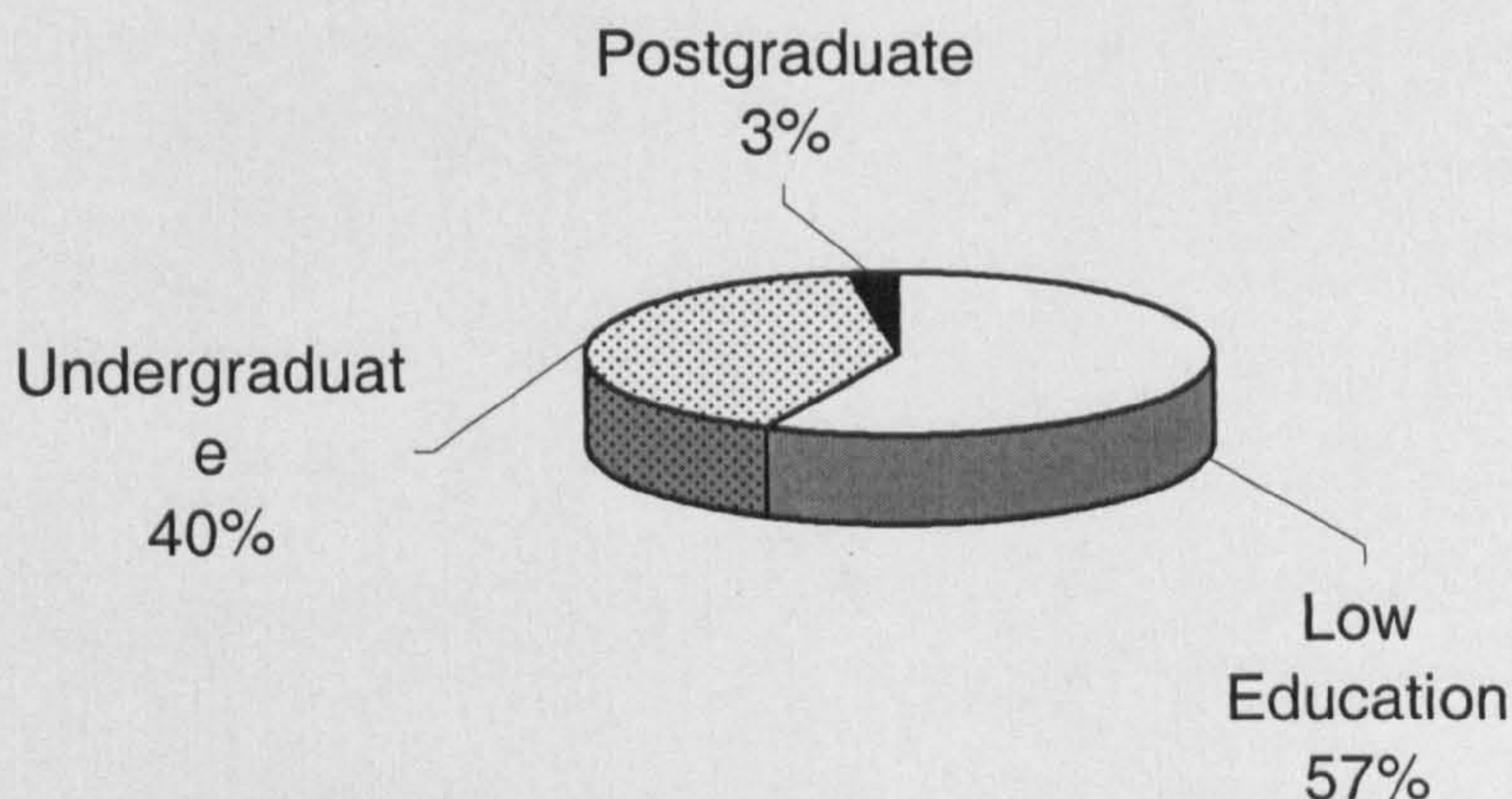


Figure 8.12 Education



³⁷⁷ Jamal, Ahmed and Kamal Naser, "Customer satisfaction and retail banking: An assessment of some of the key antecedents of customer satisfaction in retail banking", *International Journal of Bank Marketing*, Vol. 20, No. 4, 2002, pp.146-160.

³⁷⁸ 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 8.13 Experience

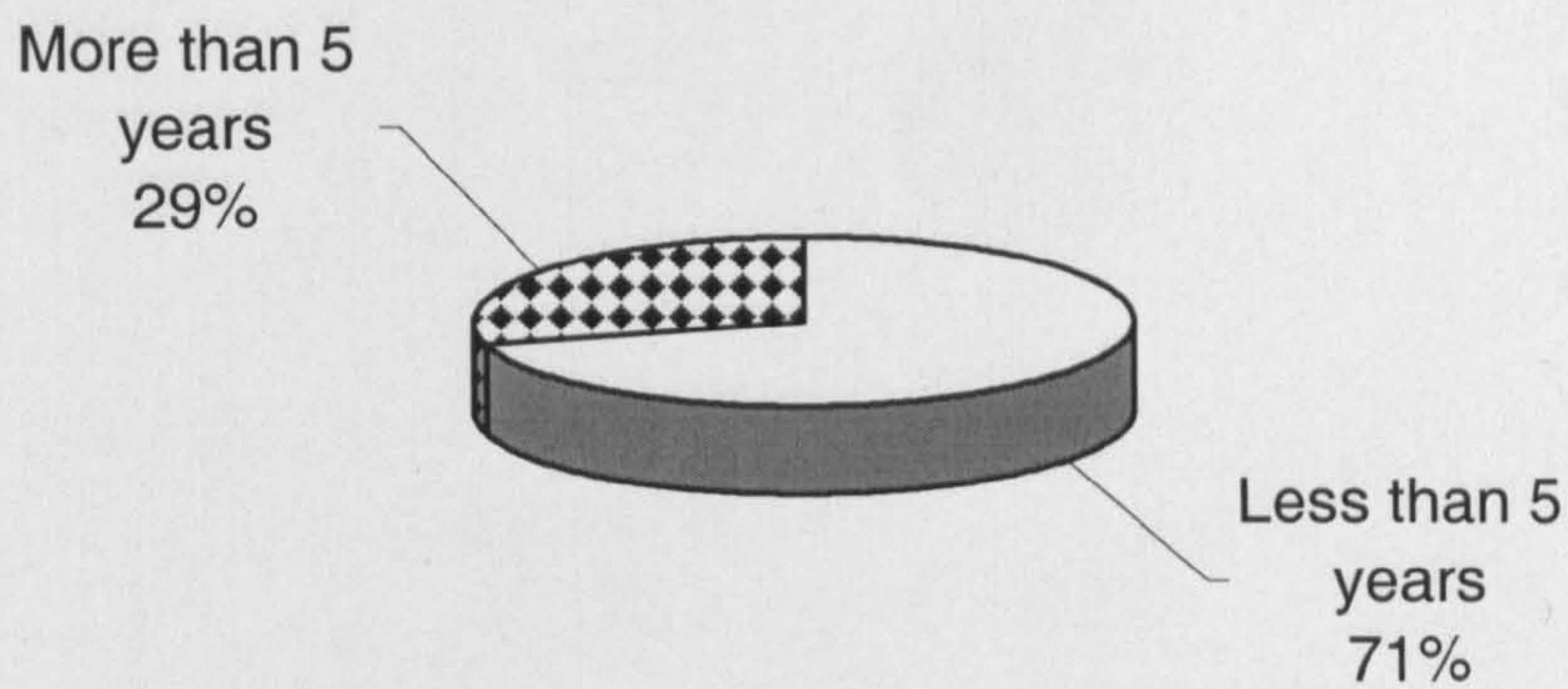
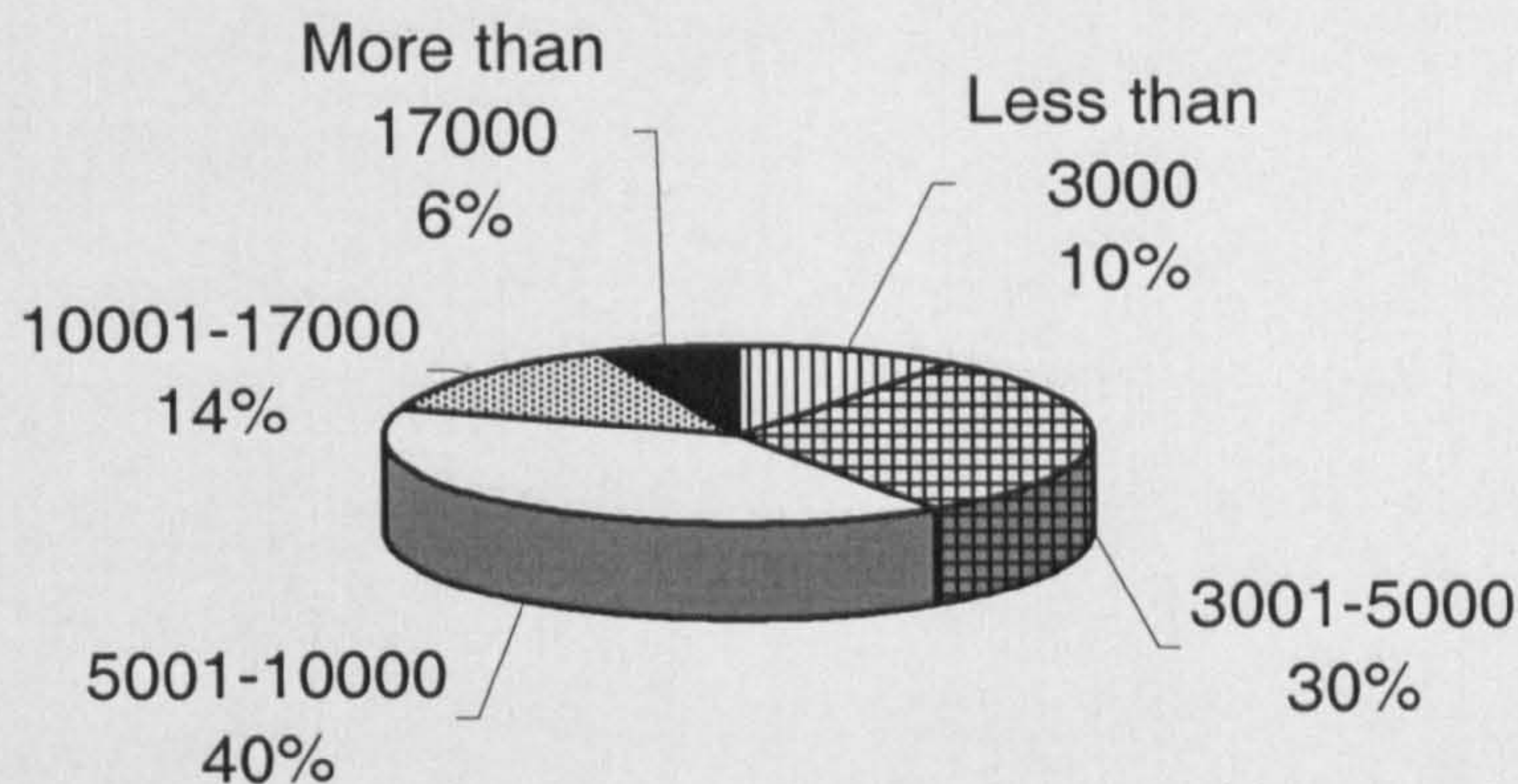


Figure 8.14 Monthly Income

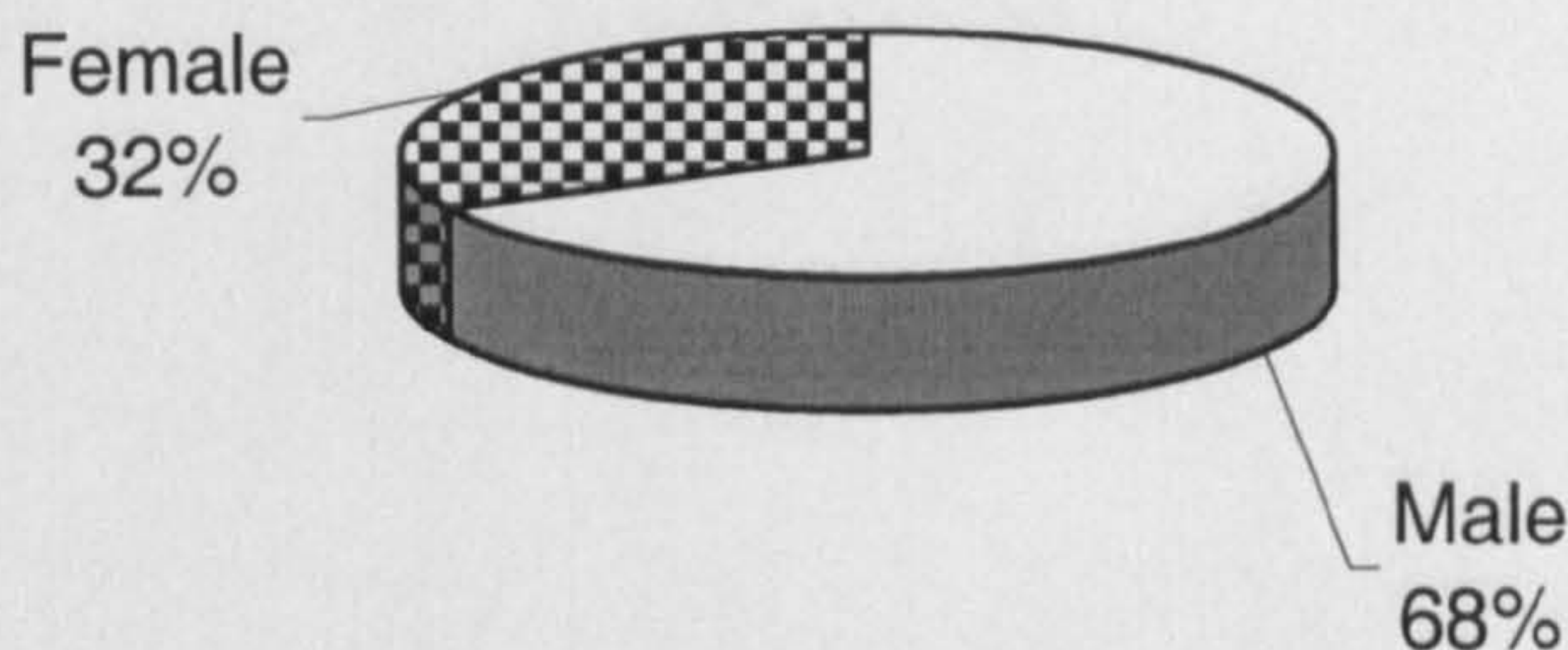


It is evident that Islamic banks in the UAE should pay attention to young and adult customers whose ages range between 20 and 40 years old, as these currently constitute over 80 per cent of the total number of customers surveyed. In this regard, research has revealed that younger people seem to lean more towards using cash machines and IT-based solutions such as ATMs and CTMs, while those with families and greater financial responsibility are more concerned about privacy issues, such as clarity of statements of accounts and banking machines that are specially designed for elderly and disabled customers.³⁷⁹ Therefore, in-depth research and development efforts are required from the UAE Islamic banks in order to understand their customers' special needs and endeavour to satisfy their wishes. Furthermore, the banks could open many service branches in places where young people gather, such as universities,

³⁷⁹ Galloway, R. L. and R. F. Blanchard, "Variation in the perception of quality with life stages in retail banking", *International Journal of Bank Marketing*, Vol. 14, No. 1, 1996, pp. 22-29.

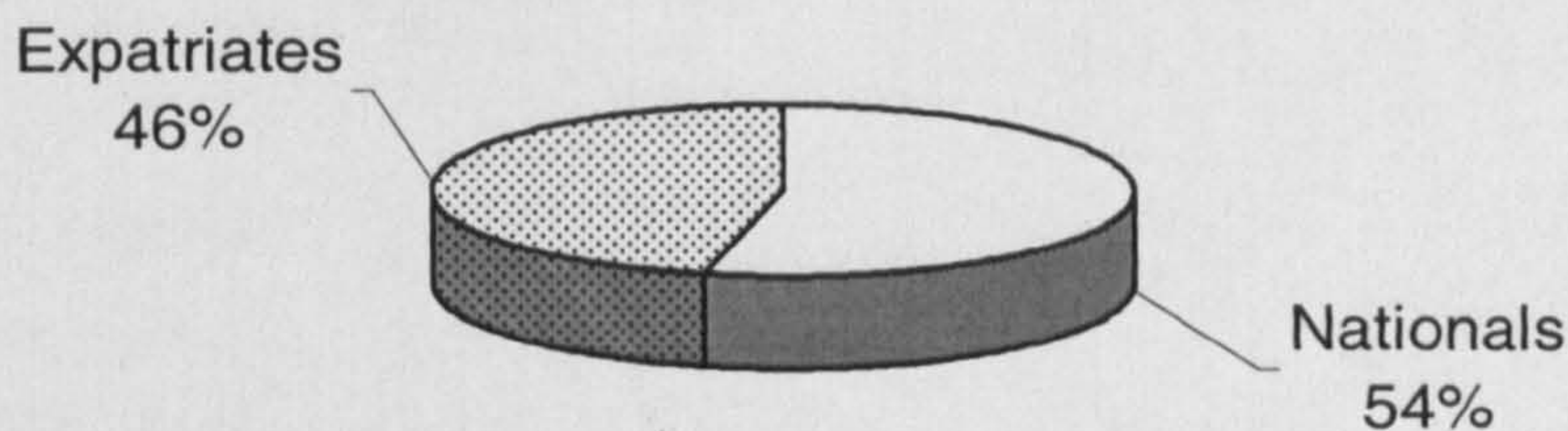
schools and shopping centres, to implant the image of the bank in the minds of the younger generation and ensure a long relationship.

Figure 8.15 Gender



This result will help the management of the Islamic banks in the UAE in designing products and service development plans, and marketing strategies, especially the marketing mix and customer segmentation. It is evident that product innovation must be based on multicultural precepts concerning specifications, preferences and customers' needs, and promotional campaigns and media advertisements should reflect the multicultural attitude of Islamic banks. For example, the advertisements and brochures should be multilingual and should be directed at the public regardless of their differences in language and religion in order to overcome the image of Islamic banks as catering only for Muslims.³⁸⁰

Figure 8.16 Nationality

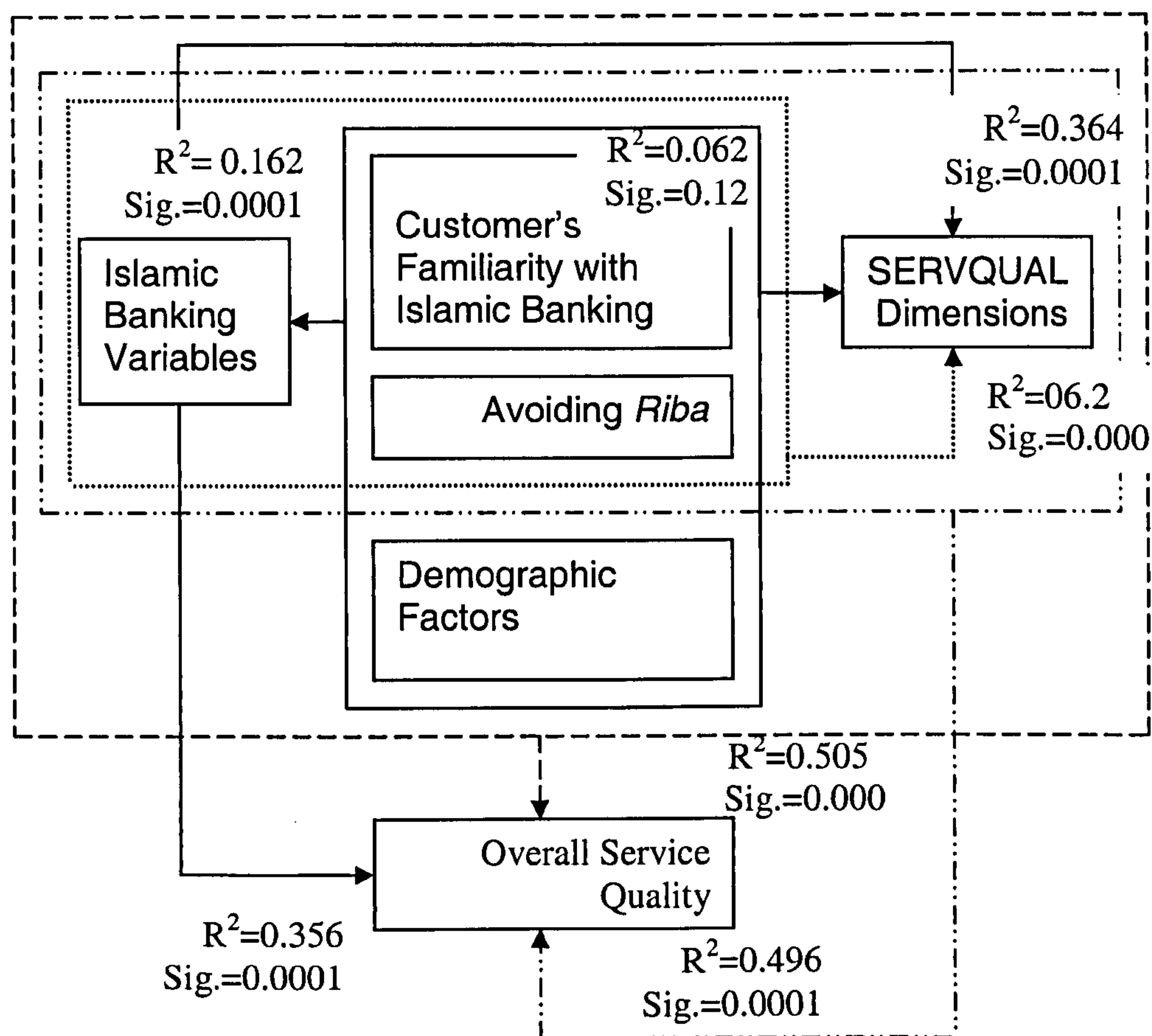


³⁸⁰ Structured interview with Mr. Saad Abdul Razzaq, Chief Executive Officer, Dubai Islamic Bank, Dubai, 6 December 2004.

8.8 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 8.17 shows and summarises the nature of this relationship.

Figure 8.17 Multi-regression results for the UAE Islamic banks

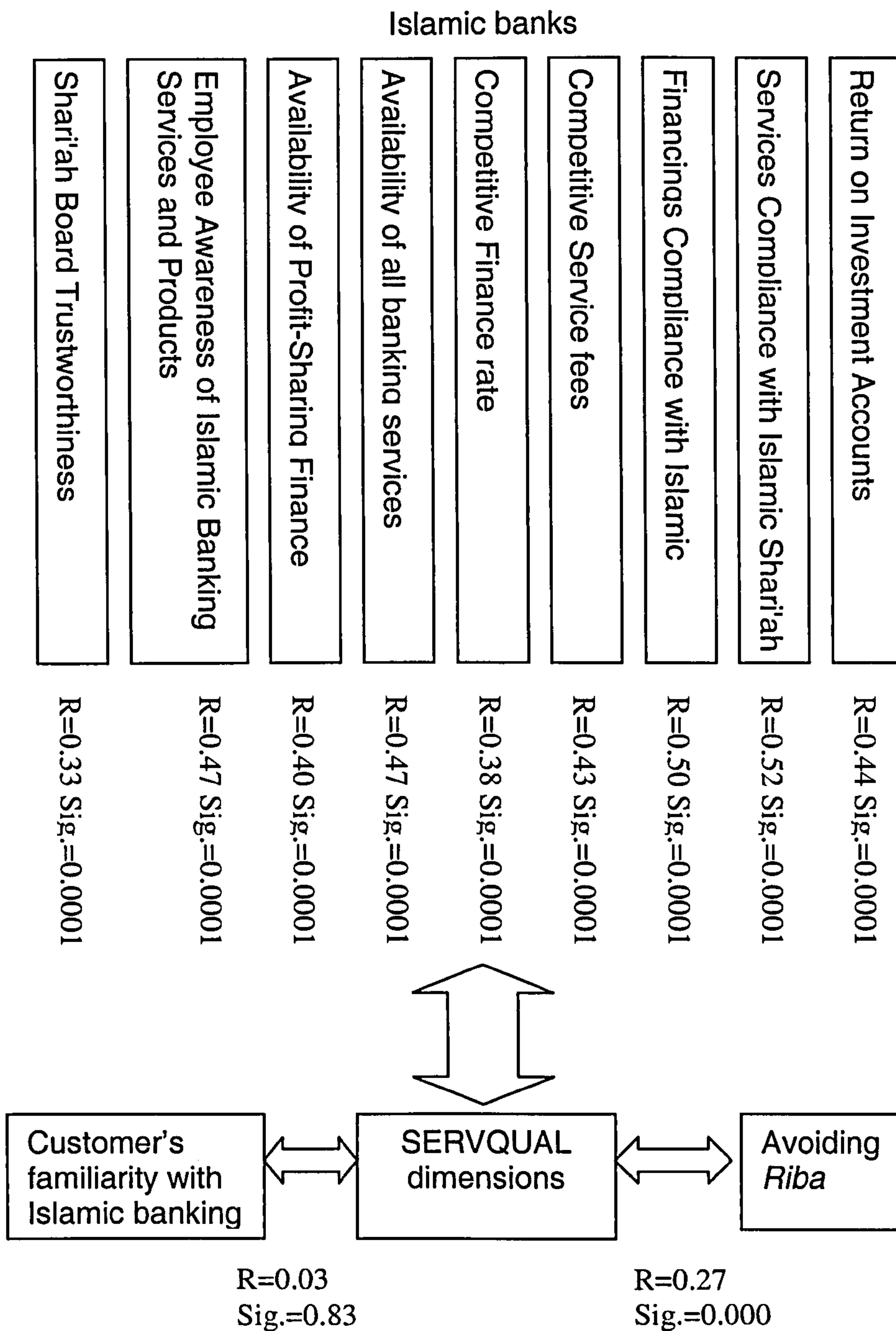


A test was carried out on the strength of the relationship between the Islamic banking variables and the SERVQUAL dimensions. The Islamic banking variables included: the *Shari'ah* boards' trustworthiness, employee awareness of Islamic banking services and products, availability of profit-sharing finance, availability of all banking services, competitive finance rates, competitive service fees, financings compliance with Islamic *Shari'ah*, services compliance with Islamic *Shari'ah* and returns on investments accounts. The SERVQUAL dimensions included: tangibles, which means the extent to which equipment,

materials, technological facilities and buildings are available and adequate; reliability, which refers to the extent to which the organization is capable of fulfilling the promised service in a proper way, responsiveness, which means the extent to which the organization is willing to help customers and offer a quick and excellent service; 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; empathy, which describes the extent to which service providers show a personal interest in the customer by trying to understand his/her needs and putting themselves in his/her place. 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. Figure 8.18 sheds light on this relationship.

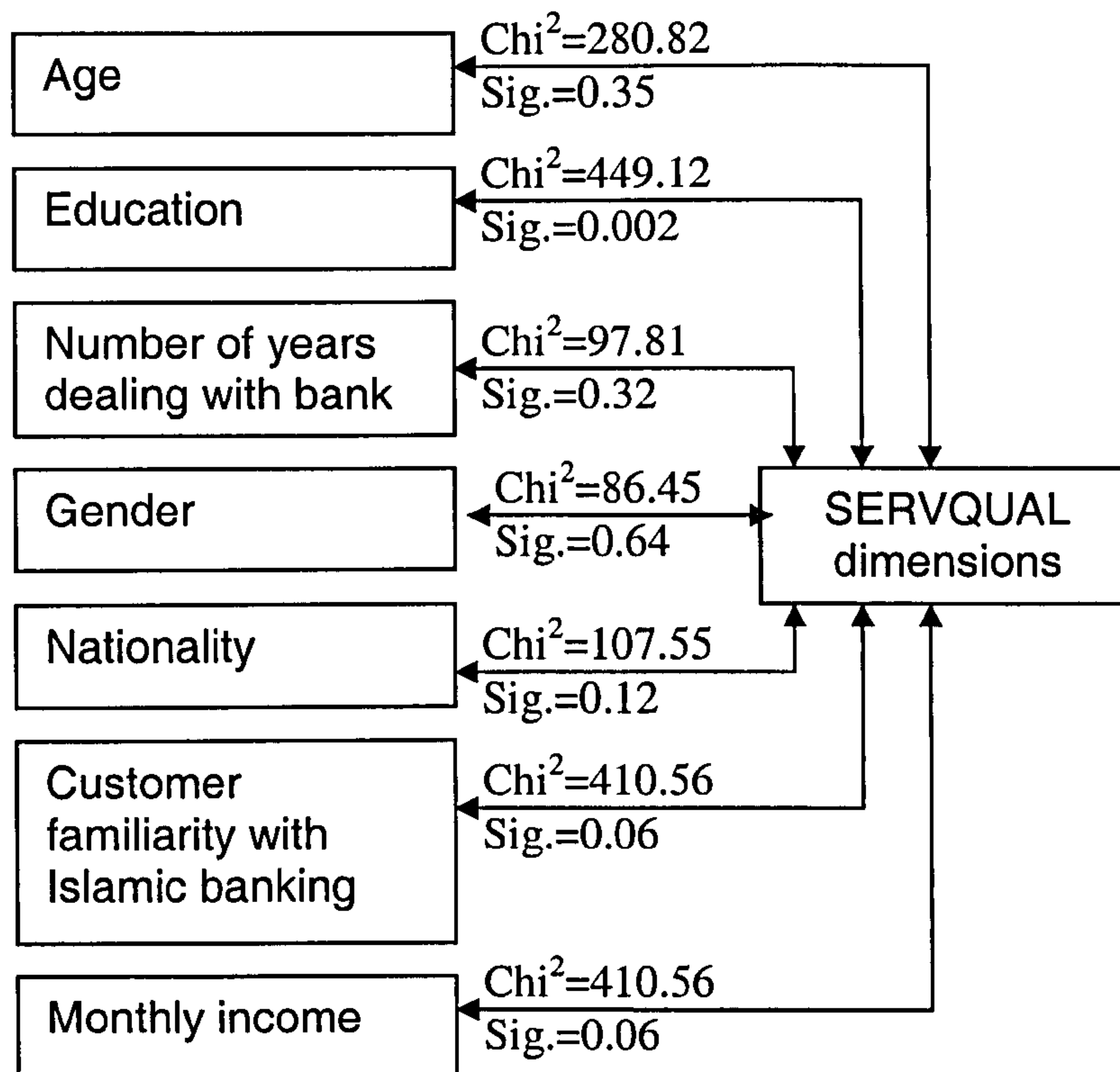
Furthermore, Pearson's correlation and Chi square tests were used in this study to measure the relationship between the independent variables and the perceived service quality as measured by the SERVQUAL dimensions, and the results revealed the existence of a significant relationship between perceived 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 trust-worthy. Figure 8.18 sheds light on this relationship.

Figure 8.18 Difference between the Islamic banking variables of the UAE



In addition, a Chi square test was used to prove the existence of relationship resulting from the dependant variables of the UAE Islamic banks. It showed that there is significant relationship in the education category. The banks must therefore consider this relationship when implementing their marketing segmentation strategies and service quality programmes. Figure 8.19 illustrates the relationship between the dependent variables and the SERVQUAL dimensions of the UAE Islamic banks.

Figure 8.19 Chi square results for the UAE Islamic banks



These findings confirm those of other studies, which identified a set of antecedents that play a very important role in forming the customers' attitudes towards service quality in the banks. These antecedents include: a one-stop service, competitive finance rates, availability of problem recovery systems, distributing high profits on savings, price, media, personnel, word of mouth and physical cues, size of bank's assets, efficiency of staff, help in financial emergencies, bank experience, friendliness of staff, bank image, communication with customer, knowledge of firm's activities, prompt provision of services and products, functionality of machines, reliability of transactions, staff efficiency and confidentiality of the service, the attentiveness and commitment shown by the staff to their customer, ATMs, computers, furniture and employees' appearance, promises such as error-free statements, accurate financial transactions, employees' courteousness and responsiveness, employees' trustworthiness and demonstration of knowledge, employees' ability to listen to customer's enquiries and react positively to his/her needs and complaints, shorter waiting time and promptness. These antecedents all play a crucial role in determining the level of service quality and in enhancing customer loyalty and customer satisfaction, which in turn increase the bank's share of

customers and in the long run enable the bank to achieve high profitability.³⁸¹

Tables 8.1 and 8.2 summarize those antecedents which play a crucial role in forming the customers' attitudes toward service quality in the banks.

Table 8.1 Employees' manners contributing to a successful delivery of service quality in the UAE Islamic banks

Factors	Type
Interaction skills	Employee
Competence skills	Employee
Willingness to communicate	Employee
Friendliness	Employee
Helpfulness	Employee
Cooperativeness	Employee
Personal attention	Employee
Promptness	Employee
Trustworthiness	Employee
Competence	Employee
Discrete behaviour	Employee
Responsiveness	Employee
Professional advice	Employee
Reputation and image	Goodwill
Progressiveness	Goodwill
Financial stability	Goodwill
Past experience	Goodwill
Friendly advice	Goodwill

³⁸¹ Levesque, Terrence, et al., "Determinants of customer satisfaction in retail banking", *International Journal of Bank Marketing*, Vol. 14, No. 7, 1996, pp. 12-20; and Montes, Fco. Javier Llorens, "Quality management in banking services: An approach to employee and customer perception", *Total Quality Management*, Vol. 14, No. 3, 2003, pp. 305-323; and Kangis, Peter and Vassiliki Passa, "Awareness of service charges and its influence on customer expectations and perceptions of quality in banking", *The Journal of Services Marketing*, Vol. 11, No. 2, 1997, pp. 105-117; and Johnston, Robert, "Identifying the critical determinants of service quality in retail banking: Importance and effect", *International Journal of Bank Marketing*, Vol. 15, No. 4, 1997, pp. 111-116; and 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.

Table 8.2 Other factors contributing to a successful delivery of service quality
the UAE Islamic banks

Factors	Type
Interest rates	Policy
Timing and opening hours	Policy
Fees and expenses	Policy
Availability of products and services	Policy
Prices	Policy
Availability of credit	Policy
Poor training	Policy
Lack of empowerment	Policy
Technology-based	Policy
Compliance with Islamic <i>Shari'ah</i>	Policy
Avoiding interest element	Policy
Innovation	Policy
Returns on investments	Policy
Special services for women	Policy
Social commitments	Policy
Customer awareness and familiarity	Policy
Understanding customer's needs	Policy
Correctness and accuracy	Process
Banking procedures	Process
Time consumption	Process
Long queues	Process
Complicated statements	Process
Confidentiality	Process
Accessibility and location convenience	Building
Transportation	Building
Number of ATMs and branches	Building

Eventually, improvement efforts regarding service quality will result in increased repeat business from current customers, increased customer referrals, increased profits, improved employee morale, development of the culture of service quality in the bank and improved productivity and communication.

8.9 Current Difficulties Confronting Islamic Banks in the UAE

The financial analysis of the UAE Islamic banks revealed the solidity of their financial position, which enables them to mobilize more savings; this reality is signified by many indicators, such as the high growth in customers' deposits, investments, net income, the profits distributed to depositors, owner's equity, earnings per share and the returns on owner's equity (ROE). The financial analysis also showed that the banks are managing their fund resources and funds deployment efficiently, and this performance has resulted in the recording of great capital strength and better risk management.

Nevertheless, Islamic banks in the UAE are just like other Islamic banks in the region in that they are suffering from many deficiencies and are faced with a number of obstacles in different directions: for example, in the efficiency of management practices, research and development efforts, the legal framework, Islamic *Shari'ah* monitoring practices and the nature of classical Islamic finance and investment instruments which lack mechanisms for hedging against financial risk and an ethical framework. Some discussion follows of the emergent difficulties confronting Islamic banks.

8.9.1 Managerial Difficulties

Unqualified management is an impediment to the growth of the UAE Islamic banks. The financial analysis of the banks showed that the management of surpluses in liquidity suffers from inefficiency owing to an inability to develop new products and services and to the rarity of qualified employees in the fields of risk analysis, portfolio management and Islamic finance business development. In particular, the study of products and services assortment in the UAE Islamic banks showed that the development and innovation of classical Islamic banking products and services in these banks is slower than in

conventional banks. In addition, the majority of innovation efforts are directed at short and medium-term instruments, while disregarding not only long-term instruments, but also those concerned with risk management, such as instruments that hedge against high currency volatility and commodity prices in the international exchange markets.³⁸²

The developers of SERVQUAL - the most reliable model for measuring perceived service quality - mention in their literature that four major gaps may exist and prevent the organization from achieving a high level of service quality. These gaps are related mainly to managerial practices, and are as follows:³⁸³

1. Gap one: lack of knowledge of customer's needs as a result of not having conducted appropriate research and development or not utilizing research findings, and weak upward communication.
2. Gap two: absence of commitment on the part of management and an absence of service quality standards.
3. Gap three: existence of managerial difficulties in employee performance; for instance, role ambiguity, role conflict, employee job-fit, technology, supervisory functions, control and team-working.
4. Gap four: lack of horizontal communication and tendency to publicize unrealistic promises.

In this regard, one researcher has suggested that Islamic banks should adopt "reverse engineering" and an "innovation" strategy to enhance the efficiency of the organizational system; the former has to do with developing the available conventional instruments to make them compatible with Islamic *Shari'ah* and the latter is concerned with designing new products.³⁸⁴ The UAE Islamic banks appear to be in need of investing more funds in product development, management skills training, continuous improvement, setting training plans for their employees, enhancing upward and downward communications, building rewards systems, encouraging employees to see service quality as their

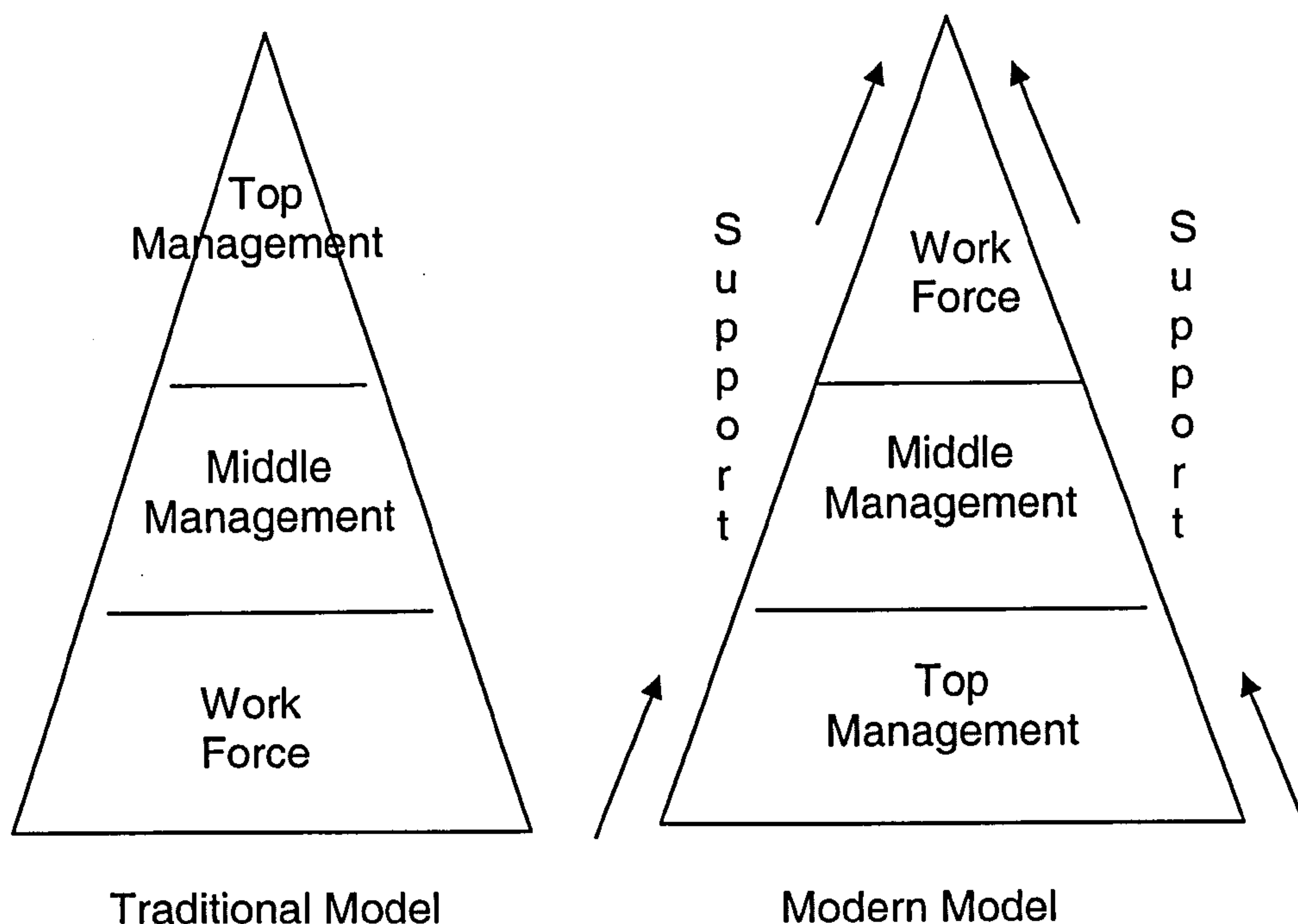
³⁸² Iqbal, Zamir, "Islamic financial systems", *Finance and development*, World Bank publication, January 1997, pp. 42-45.

³⁸³ Zeithaml, Valarie, et al., *Delivering quality service: Balancing customer perceptions and expectations*, New York: The Free Press, 1990, p.55-133.

³⁸⁴ Iqbal, Zamir, "The development of Islamic financial institutes and future challenges", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromoney Books and AAOIFI, London, 2004, p. 58.

responsibility, and empowering employees by giving them responsibilities and a real voice. In particular, the findings of this study confirm those of another study, which demonstrated that the employees of the Islamic banks in general lack awareness of the *Shari'ah* principles that govern all Islamic business transactions in the bank. As a result, some profits of transactions that do not adhere to the Islamic *Shari'ah* are deducted from the net profit.³⁸⁵ The UAE Islamic banks' manpower should thus be given a solid grounding in both the Islamic *Shari'ah* and banking and finance techniques.³⁸⁶

Figure 8.20 Traditional Versus Modern Organization chart



Source: The Ernst & Young, Quality Improvement Consulting Group, *Total Quality: A Manager's Guide for the 1990s*, Kogan Page, London, 1992, pp. 167-168.

The management must have a flexible organizational structure as part of their modern vision and strategy. The prevailing structure for the UAE Islamic banks is that of a holding company, which is the right model for operating different investment and commercial activities such as diversified *Musharakah* portfolios, which permit Islamic banks to achieve high levels of transparency and avoid

³⁸⁵ Kotby, Hussein E., "Financial engineering for Islamic banks: The option approach", IMES-I.U.J, *Working Papers Series*, No. 23, November 1990, p. 38.

³⁸⁶ Structured interview with Dr. Jassim Al Shamsi, Shari'ah Board Member, Abu Dhabi Islamic Bank, Dubai, 31 January 2005.

any illegal element in businesses from the Islamic *Shari'ah* point of view, such as *Gharar*. On the other hand, the use of this model also lowers the financial risk that is imbedded in *Musharakah*. Another structure is the Bona Fide Subsidiary model, where the Islamic bank has a number of companies, each of which has its own capital, separate operation separate accounting system, and separate board of directors where the majority members of them are not members of the Islamic bank's board of directors. The third model the banks could adopt is the universal banking model, in which various different activities are operated under one umbrella. In other words, the Islamic bank can have many divisions, such as commercial banking, investment banking and insurance provision.³⁸⁷

8.9.2 Difficulties Arising from *Shari'ah* Boards

Islamic banks in the UAE seem to suffer in the same way as other Islamic banks from a lack of *Shari'ah* board independence, transparency, qualifications and uniformity of discretion and scholars' opinions.³⁸⁸ Compliance with the internationally-acknowledged Islamic banking standards will add more transparency and trust to the UAE Islamic banks' activities, which in turn will improve their ability to operate globally. Also, all Islamic banks in the UAE share almost the same *Shari'ah* board members, since there are only a few names that are well trusted and famous enough to be nominated by bank boards of directors. Another problem with the *Shari'ah* boards is related to the lack of qualifications among their members: a typical *Shari'ah* board member usually has a rigid background in *Shari'ah* jurisprudence and little experience of finance and accounting.³⁸⁹

The existence of these difficulties was confirmed by the *Shari'ah* board members themselves, who stated that the main obstacle preventing the *Shari'ah* board from achieving its goal is the dependency of the *Shari'ah* board

³⁸⁷ Wilson, Rodney, "Islamic finance and ethical investment", *International Journal of Social Economics*, Vol. 24, No. 11, 1997, pp. 1325-1342.

³⁸⁸ Usmani, Muhammed Taqi, *An introduction to Islamic finance*, Kluwer Law International, The Netherlands, 2002, p. 62; and Tlemsani, Issam and Robin Mathews, "Ethical banking: The Islamic view", *Kingston Business School*, London, Available from: <http://business.king.ac.uk/research/intbus/ethbank.pdf>, [Accessed on 19 July 2004].

³⁸⁹ Structured interview with Mr. Majdi Al Rifai, Branches Operation, Abu Dhabi Islamic Bank, Abu Dhabi, 27 December 2004; and Structured interview with Mr. Saeed Al Qamzi, General Manager, Sharjah Islamic Bank, Sharjah, 8 May 2005; and Structured interview with Mr. Abdul Naser Al Mannai, Head of Shari'ah Supervision, Sharjah Islamic Bank, Sharjah, 8 May 2005.

members on the bank's management for their salaries, since the management often contradicts the board's decisions in the performance of its functions.³⁹⁰ On the other hand, the monopoly of Shari'ah board members is another underlined emerging issue and in this regard, one *Shari'ah* board member suggested that one way to minimize the monopoly of *Shari'ah* board members would be to attract and qualify UAE nationals, with the UAE Central Bank playing a crucial role in encouraging the boards of directors of the UAE Islamic banks to achieve this goal.³⁹¹ Meanwhile, one way of overcoming the lack of standards in the UAE Islamic banks is to comply with AAOIFI and Islamic financial services board IFSB standards and the decisions of other Islamic Fiqh Academy, such as the decisions of the Islamic Conference Organization and the Muslim World League, and adopt training programmes for *Shari'ah* auditors to ensure that they have a clear understanding of these standards. Others see the establishment of an association for *Shari'ah* control by the Islamic banks and the Central Bank as a possible solution. The main function of such an association would be to audit the activities of the Islamic banks and publish independent reports to their stakeholders.³⁹²

8.9.3 Corporate Governance Difficulties

The Islamic banks in the UAE are operating in the absence of a regulatory, legal and organizing framework,³⁹³ and of accounting standards.³⁹⁴ For instance, one of the contractual problems is related to the legal rights of investment account holders, who have the right to participate in general assemblies and monitor the bank's activities according to the *Mudarabah* contract, this being the only recourse open to an investment account holder, who is virtually dependent on the prudence of the bank's management.³⁹⁵ However, investment account holders are currently not considered as

³⁹⁰ Structured interview with Dr. Mohammed Zuair, Head of Shari'ah Supervision Department, Dubai Islamic Bank, Dubai, 31 January 2005.

³⁹¹ Structured interview with Dr. Jassim Al Shamsi, Shari'ah Board Member, Abu Dhabi Islamic Bank, Dubai, 31 January 2005.

³⁹² Wilson, Rodney, "Retail development and wholesale possibilities", Rodney Wilson (ed.), *Islamic Finance Markets*, Routledge, London, 1990, p.13.

³⁹³ Iqbal, Zamir, "Islamic financial systems", *Finance and development*, World Bank publication, January 1997, pp. 42-45.

³⁹⁴ Wilson, Rodney, op. cit., pp. 12-13.

³⁹⁵ Saleh, Nabil A., "Financial transactions and the Islamic theory of obligations and contracts", Chibli Mallat (ed.), *Islamic law and finance*, Graham & Trotman Limited, London, 1988, p. 160.

stakeholders and do not have the right to participate in the general assembly meetings, even though they are considered to be the major source of funding for the Islamic bank's capital and are exposed to losses of their capital vis-à-vis equity owners.³⁹⁶ Nevertheless, the depositors' participation is legalized, according to some researchers, as the depositors have a "direct financial stake" in the Islamic banks' investments and equity.^{397 398 399 400} The main problem with their participating in the general assembly is the large number of depositors in each bank. In this regard, it is suggested that in order for the Central Bank to succeed in preserving the right of depositors to participate in general assembly meetings, it could either encourage each bank to nominate at random a representative from the deposit account database, or the Central Bank itself could nominate an executive officer from its higher management to represent the depositors.

Another obstacle facing the Islamic banks in the UAE is the absence of a new regulatory framework to substitute for the current banking regulations, which were developed with interest-based banking in mind. The existing banking regulations in the UAE still encourage and support the conventional banking system at the expense of Islamic banks. For instance, Islamic banks are excluded from the privileges provided by the Central Bank and are obliged to conform to the regulations.⁴⁰¹ Compatibility with the international banking system and the old relationships between the conventional banks provide the greatest support to conventional banks in Islamic countries, because such banks are considered to be members of the global banking network, while Islamic banks are excluded because of the unfamiliarity of the Islamic banking system.⁴⁰² In this context, it is suggested that Islamic banks could gain

³⁹⁶ Iqbal, Zamir, "The development of Islamic financial institutes and future challenges", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromoney Books and AAOIFI, London, 2004, p. 60.

³⁹⁷ Al Gaoud, L. M. and Mervyn K. Lewis, "Corporate governance in Islamic banking: The case of Bahrain", 1999.

³⁹⁸ Structured interview with Dr. Mohammed Zuair, Head of Shari'ah Control Department, Dubai Islamic Bank, Dubai, 31 January 2005.

³⁹⁹ Structured interview with Mr. Saad Abdul Razzaq, Chief Executive Officer, Dubai Islamic Bank, Dubai, 6 December 2004.

⁴⁰⁰ Structured interview with Mr. Ali Bin Zayed, Deputy Governor, The UAE Central Bank, Dubai, 31 January 2005.

⁴⁰¹ Iqbal, Zamir, "Islamic financial systems", *Finance and development*, World Bank publication, January 1997, pp. 42-45.

⁴⁰² Yousri, A. A., —, Available from: <http://www.islamiceconomics.4t.com/>, [Accessed on 6 June 2004]

credibility by strictly following clear standards such as the AAOIFI and IFSB standards, while the Central Bank can play a crucial role in bringing uniformity to the general practices.⁴⁰³

Another example of the lack of regulations is that the management of the UAE Islamic banks lack transparency in terms of declaring their financial reports and do not consistently follow accounting standards and management practice.⁴⁰⁴ For instance, the annual reports of Islamic banks do not show full details of the bank's operations, such as detailed figures of the volume of Islamic financial instruments that have been used by the bank.⁴⁰⁵

The corporate governance requirements of the UAE Islamic banks are mainly legitimized by the UAE Central Bank and the Basle Accords, in particular Basle II. Figure 8.21 illustrates the types of corporate governance that may be existed in Islamic banks. While the UAE Central Bank is concerned with the control of the domestic banking industry, the Basle Accord is concerned with the standardization of international banking relationships. In terms of strengthening these relationships, the Chief Executive Officer of an Islamic bank in the UAE has requested that new, separate laws be established for Islamic banks in the UAE.⁴⁰⁶ This suggestion has been sanctioned and supported by the Deputy Governor of the UAE Central Bank who added that establishing a specialized department in the Central Bank to monitor and control the Islamic banks' activities and practices is an important step.⁴⁰⁷

⁴⁰³ Wilson, Rodney, "The evaluation of Islamic finance systems", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromoney Books and AAOIFI, London, 2004, p. 41.

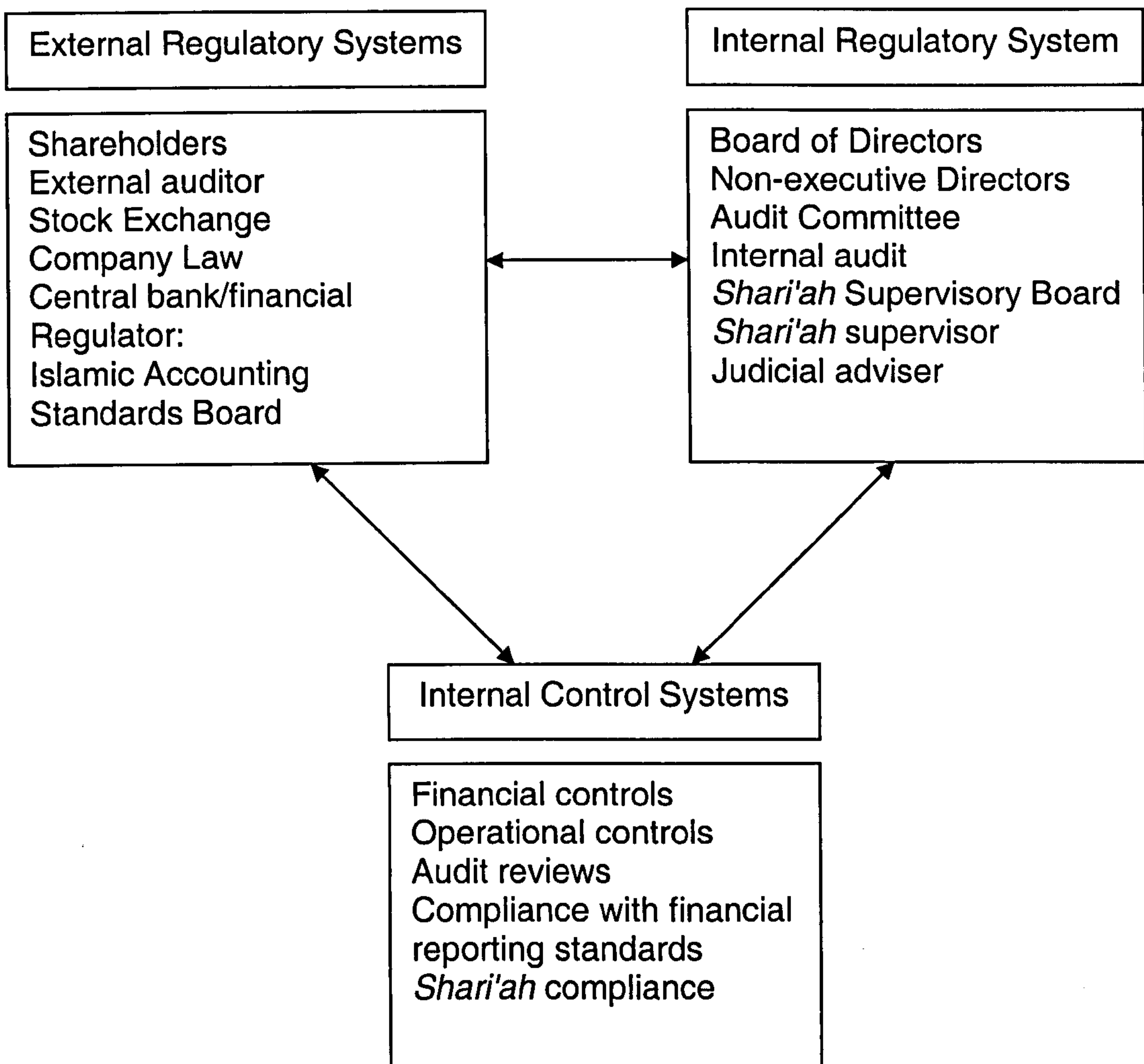
⁴⁰⁴ Iqbal, Zamir, "The development of Islamic financial institutes and future challenges", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromoney Books and AAOIFI, London, 2004, p. 61.

⁴⁰⁵ Saleh, Nabil A., "Financial transactions and the Islamic theory of obligations and contracts", Chibli Mallat (ed.), *Islamic law and finance*, Graham & Trotman Limited, London, 1988, p. 159.

⁴⁰⁶ Structured interview with Mr. Saad Abdul Razzaq, Chief Executive Officer, Dubai Islamic Bank, Dubai, 6 December 2004.

⁴⁰⁷ Structured interview with Mr. Ali Bin Zayed, Deputy Governor, The UAE Central Bank, Dubai, 31 January 2005.

Figure 8.21 Corporate Governance in Islamic banks



Source: Al Gaoud, L. M. and Mervyn K. Lewis, "Corporate governance in Islamic banking: The case of Bahrain", 1999.

8.9.4 Liquidity Management Difficulties

Because of the ban on interest, monopoly, speculation, uncertainty and lack of disclosure and transparency, many hedging and liquidable instruments, which are described as debt-based, are not lawful. Furthermore, treasury bills, corporate and municipal bonds and preferred stock,⁴⁰⁸ in addition to a long list of financial hybrids such as derivatives, short selling, buying on the margin,

⁴⁰⁸ Delorenzo, Yusuf Talal, "The religious foundation of Islamic finance", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromony Books and AAOIFI, London, 2004, p. 21.

futures and options, are also not permissible according to the Islamic *Shari'ah*.⁴⁰⁹

The lack of liquidity management is thus a major problem for Islamic banking and stems from the fact that the majority of deposits are short-term and the majority of assets are long-term. However, from the point of view of one researcher, the short-term liquidity requirements are met by the surplus of unemployed liquidity reserves and the high *Murabahah* profit rate, and thus Islamic banks are unlikely to be exposed to the risks of insolvency and bankruptcy.⁴¹⁰ Nevertheless, other researchers have stated that the liquidity crisis comes from the existence of short-term deposits and the absence of penalties for defaults on *Murabahah* instalments, which creates a large investment pool on the one hand, and excessive dependence on call accounts in the shadow of an absence of any inter-bank facility to cover the expected shortage in the liquidity requirements, on the other.⁴¹¹

Further possible solutions to the UAE Islamic banks' liquidity problem are as follows:

1. Innovation and promotion of *Sukuk*, inter-bank debt certificates and government debt certificates.⁴¹²
2. Promotion of the *Mudarabah* Inter-bank Instrument as an option to enable Islamic banks facing a liquidity shortage to obtain funding from other banks who have a surplus. The *Mudarabah* Inter-bank Instrument certificate is issued for a fixed period to mature over time and can be issued for a 12-month period; the profit rate is predetermined and the principal is paid on maturity.⁴¹³
3. Islamic banks in the UAE could establish mutual funds based on assets obtained through *Musharakah* or *Ijarah*, where investments are mainly in

⁴⁰⁹ Delorenzo, Yusuf Talal, "The religious foundation of Islamic finance", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromony Books and AAOIFI, London, 2004, p. 23.

⁴¹⁰ Ibrahim, Badrel-deen A., "Liquidity in Islamic banks", *Al Khaleej Newspaper*, No. 8869, UAE, 31 August 2003, p. 7.

⁴¹¹ Ibrahim, Badrel-deen A., "Expectation of liquidity crisis in Islamic banks", *Al Khaleej Newspaper*, No. 9104, UAE, 22 April 2004, p. 5.

⁴¹² Wilson, Rodney, "Retail development and wholesale possibilities", Rodney Wilson (ed.), *Islamic Finance Markets*, Routledge, London, 1990, p.15; and Azzam, Henri T., "Sukuk and the enforcement of the Islamic financial market", *Al Khaleej newspaper*, UAE, Jan 7, 2004, UAE.

⁴¹³ Usmani, Muhammed Taqi, *An introduction to Islamic finance*, Kluwer Law International, The Netherlands, 2002, pp. 48-49.

the form of tangible assets and the fund capital is divided into small units in the form of negotiable certificates. An Inter-Islamic Bank Rate (IIBR) could be created in place of the LIBOR rate.⁴¹⁴ The Islamic security market would provide profitable liquid assets to replace the inter-bank deposit finance which is currently so important, and bridge the gap in liquidity management.⁴¹⁵

8.9.5 Difficulties in Projects Finance

8.9.5.1 Joint Venture Project Finance

The sale-based or mark-up based models of finance such as *Murabaha* and *Ijarah* dominate the UAE Islamic banks' financial portfolios and constitute between 70 to 80 per cent of their total fundable assets. The preference of the Islamic banks for these two models is explained by the fact that *Murabahah* and *Ijarah* enjoy low risk, incur low expenses and consist of fixed income rates, while a small part of the fundable fund is deployed on the basis of participation contracts, which are characterized by high financial risk. This is confirmed by other studies in the field, such as those of Wilson, Iqbal, Arif and Saleh.⁴¹⁶

On the other hand, in practice, the perfect application of profit and loss sharing techniques such as *Murabahah* and *Musharakah* encounters many obstacles, including: administration and set-up expenses, shortage of expertise, lack of secondary capital markets,⁴¹⁷ lack of information transparency, moral hazard - concealing the profit and absorbing it through distribution in unauthorized

⁴¹⁴ Usmani, Muhammed Taqi, *An introduction to Islamic finance*, Kluwer Law International, The Netherlands, 2002, pp. 48-49.

⁴¹⁵ Wilson, Rodney, "The evaluation of Islamic finance systems", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromony Books and AAOIFI, London, 2004, pp. 35-36.

⁴¹⁶ Wilson, Rodney, "The interface between Islamic and conventional banking", Munawar Iqbal and David T. Llewellyn (eds.), *Islamic banking and finance*, Edward Elgar, Cheltenham, UK, 2002, p. 201; and Arif, Mohammed, "Islamic banking", *Asian-Pacific Economic Literature*, Vol. 2. No. 2, September 1988, pp. 46-62; and Iqbal, Zamir, "The development of Islamic financial institutes and future challenges", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromony Books and AAOIFI, London, 2004, p. 45; and Saleh, Nabil A., "Financial transactions and the Islamic theory of obligations and contracts", Chibli Mallat (ed.), *Islamic law and finance*, Graham & Trotman Limited, London, 1988, p. 157.

⁴¹⁷ Saleh, Nabil A., "Financial transactions and the Islamic theory of obligations and contracts", Chibli Mallat (ed.), *Islamic law and finance*, Graham & Trotman Limited, London, 1988, pp. 46-62.

perquisites, asymmetric information, the structure of incentives exchanged between PLS parties, the nature of the relationship between the principal and the agent and the monitoring processes of PLS projects.⁴¹⁸ Therefore, manipulation and the structure of incentives, the jeopardizing that may be carried out by working partners and the disclosure of industry secrets by the investors, in addition to the financial risk, means these kinds of finance are undesirable.⁴¹⁹ There are many reasons why the UAE Islamic banks do not participate in long-term and low yield projects, including: the long and complicated procedure of assessments, the lack of expertise and experience, the absence of standard criteria of evaluation of profit and loss sharing systems, the fact that the paid-up capital is tied up for a long period of time and cannot be covered in a regular manner from the beginning of the project, compared with conventional loans, where the interest accrues over a fixed period.⁴²⁰

As a result, the use of *Mudarabah* in financial operations still needs to be developed, since banks will only use this instrument if they have confidence in the project's owner and in the efficiency of the management of the project. In fact, Islamic banks rarely engage in *Mudarabah* because the ultimate financial risk will be borne by the bank, which explains their requirement of high returns on such projects.⁴²¹ As regards liabilities, the *Mudarabah* contract as a source of funding is considered inappropriate, especially if the customer withdraws his money before maturity, as this would leave the bank with a liquidity problem. To overcome this problem *Mudarabah* in the form of *Sukuk* can be used, where the certificate will mature at the same time as the project or after five years, whichever is earlier; the certificate can be negotiated in the stock market but cannot be liquidated during the life of the project or before its maturity.⁴²²

⁴¹⁸ Iqbal, Munawar and David T. Llewellyn, *Islamic banking and finance*, Edward Elgar, Cheltenham, UK, 2002. pp. 7-13.

⁴¹⁹ Usmani, Muhammed Taqi, *An introduction to Islamic finance*, Kluwer Law International, The Netherlands, 2002, pp. 48-49.

⁴²⁰ Schmitz, Alyson, et al., "Islamic banking", Available from: <http://cobacourses.creighton.edu/>, [Accessed on 7 June 2004].

⁴²¹ Wilson, Rodney, "The interface between Islamic and conventional banking", Munawar Iqbal and David T. Llewellyn (eds.), *Islamic banking and finance*, Edward Elgar, Cheltenham, 2002, p. 201.

⁴²² Yousr, A. A.,—, Available from: <http://www.islamiceconomics.4t.com/>, [Accessed on 6 June 2004].

8.9.5.2 Finance for Small Business Enterprises and Entrepreneurs

The UAE Islamic banks are reluctant to offer finance to small business enterprises and entrepreneurs, and usually stipulate certain comprehensive criteria based on collaterals and past achievements analysis before granting finance, to eliminate the risk of profit and loss sharing finance. These requirements prevent entrepreneurs from obtaining finance for their businesses from Islamic banks. *Mudarabah* is thus preferred by entrepreneurs, as they do not have to offer collateral and guarantees to obtain finance.⁴²³ *Musharakah*, on the other hand, is not popular, since entrepreneurs are unwilling to share the fruits of profitable projects with the bank, or to accept interference by the bank in management decisions. Nevertheless, from one researcher's point of view, this drawback to *Musharakah* can be avoided by developing *Musharakah* stocks that do not give their holders the right to vote.⁴²⁴

8.9.5.3 Mobilizing Private Savings to Finance Public or Government Projects

The UAE Islamic banks do not have viable instruments available to mobilize private savings and participate in government finance. In this regard, one study has proposed that there are two options open to the banks. The first is based on the profit and loss sharing concept, where the Government and bank share the returns produced by a project such as an airport or public utilities building. In practice, many examples of this already exist, such as the Participation Term Certificate (PTC), which is based on *Musharakah* and used in Pakistan, the Central Bank *Musharakah* Certificate (CMC), which is equity-based and is used in Sudan to manage the inter-bank liquidity requirements. The second option is that a cost-plus instrument might be implemented, such as the Government *Murabahah* Certificate (GMC), which is used in Sudan to raise finance for government projects. There are also other instruments that are based on deferred payments and aimed at parts of the private sector that build projects for the Government, for example, the *Ijarah*, *Istisna* and *Salam* certificates.⁴²⁵

⁴²³ Al Omar, Fuad and Mohammed Abdel-Haq, *Islamic banking: Theory, practice & challenges*, Zed Books, New Jersey, 1996, p.14.

⁴²⁴ Saleh, Nabil A., "Financial transactions and the Islamic theory of obligations and contracts", Chibli Mallat (ed), *Islamic law and finance*, Graham & Trotman Limited, London, 1988, p. 159.

⁴²⁵ Siddiqi, M.N., "Funding projects: The Islamic finance option", *Banker Middle East*, Feb 2002, pp. 24-25.

8.9.5.4 Financing Existing Businesses and Working Capital Expenses

The current Islamic banking instruments involve short-term finance and hence are not suitable for the requirements of running a business, such as financing working capital and overhead expenses that require advance cash or liquid money. In this regard, it is proposed that the UAE Islamic banks could employ the following instruments:

1. *Istisna* is an important form of Islamic finance for financing a range of small industrial businesses. Using this, the Islamic banks might play an important role in helping this type of business to grow, which can be accomplished by the bank's acting as an intermediary between large industrial businesses and the Government, who ask for work on new projects.⁴²⁶ *Istisna* is a form of pre-payment and is especially designed to finance construction projects.⁴²⁷ It is a proper financial tool for short-term finance, such as working capital.⁴²⁸
2. The *Salam* contract is also a promising financial instrument in need of more research and development efforts to make it practical for the banking industry after minimizing the implied financial risks, such as the credit risk, in which there is the possibility that the seller of the sold goods will not be able to deliver the goods on the maturity of the contract, and the exchange rate risk, where the prefixed price of the sold goods might decline with maturity.
3. *Ijarah* is a fast-growing Islamic finance model and enjoys a high degree of flexibility besides its viability in economic development and compatibility with the conventional hire-purchase agreement. *Ijarah* can therefore be used in conjunction with conventional lease operations to form a syndication agreement between Islamic banks and conventional banks to finance a project's assets, in addition to financing large projects.⁴²⁹ Each of the UAE Islamic banks could establish a subsidiary company whose core business is the *Ijarah* operation, in which the assets will be owned by the company; also the Islamic banks could issue *Ijarah Sukuk* to finance those businesses that enjoy a low risk and stable

⁴²⁶ Siddiqi, M.N., "Funding projects: The Islamic finance option", *Banker Middle East*, Feb 2002, pp. 24-25.

⁴²⁷ Wilson, Rodney, "The way ahead for standardization", *Islamic banking and finance*, No.1, 2003, pp 12-14.

⁴²⁸ Al Omar, Fuad and Mohammed Abdel-Haq, *Islamic banking: Theory, practice & challenges*, Zed Books, New Jersey, 1996, pp.18-19.

⁴²⁹ Warde, Ibrahim, *Islamic finance in the global economy*, Edinburgh University Press, 2000, p.135.

frequent returns.⁴³⁰

8.10 Conclusion

The findings of this study confirm that the SERVQUAL model has a high reliability level of over 90 per cent, which is in line with the findings of other studies in the field. In addition, the findings also confirm that the proposed model is valid for measuring the perceived service quality of the UAE Islamic banks. Furthermore, the findings confirm those of previous studies which proved the importance of Islamic banking variables and the existence of a positive correlation between these variables and the perceived service quality that is measured by the SERVQUAL dimensions. The findings also confirm the findings of previous studies that the avoidance of interest and the degree of customer familiarity with Islamic banking products and services have a significant effect on the formation of the customer's perception of the level of service quality in the UAE Islamic banks, and accordingly on the level of customer satisfaction.

In general, the findings of this study prove that the service quality level in the UAE Islamic banks provides them with a competitive advantage, and there is a significant positive relationship between service quality and Islamic banking variables in forming the customer's perception, which means that the banks should continually work towards measuring the perceived service quality and strengthening those factors that are most influential in framing the perception of customers regarding the service quality.

Islamic banks in the UAE, just like other Islamic banks around the world, encounter many difficulties that prevent them from flourishing as they would like to. Some of these difficulties pertain to the nature of Islamic banking, which is based on the banning of interest, and some are the result of uncertainty and gambling in finance. There are also other difficulties related to management practice and the legal environment. However, the development of currently undesirable Islamic banking models such as *Musharakah* and *Murabahah* will

⁴³⁰ Yousri, A. A.,—, Available from: <http://www.islamiceconomics.4t.com/>, [Accessed on 6 June 2004].

enhance the level of diversity and flexibility, which in turn will minimize the financial risks and fortify the profitability and market share of the UAE Islamic banks.

Chapter Nine

Conclusion and Recommendations

9.1 Introduction

This study aimed at measuring the perceived service quality of the UAE Islamic banks as an ultimate indicator of the strength and stability of the financial position of Islamic banks in the UAE. In order to measure the perceived service quality of the UAE Islamic banks, the SERVQUAL model, as developed by Parasuraman et al., was used. An additional group of independent variables representing the special nature of Islamic banking was incorporated into the SERVQUAL model. The findings of the study indicate that the proposed model is highly reliable and viable for measuring the perceived service quality of the UAE Islamic banks. The findings also indicate that the Islamic banking variables have a significant effect on the formation of customers' perceptions of service quality. Furthermore, the customer's desire to avoid *riba*, the level of customer familiarity with products and services and customer demographic factors also have a significant effect on the formation of perceived service quality of the UAE Islamic banks. This chapter will present the conclusion and recommendations that arise from the discussion of the study's findings, including both theoretical and managerial implications.

9.2 Theoretical Implications

1. This study has demonstrated that the conceptual model that was used to measure the perceived level of service quality of 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 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.

9.3 The Importance of Service Quality Dimensions

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 tangibles, empathy and reliability, which confirms the findings of other studies in the field. It is therefore recommended that Islamic banks in the UAE should work on improving the elements of the important dimensions in their business environment, and this may include the following:

1. Improving the tangibles items, which reflect to what extent the bank's environment is clean and friendly; decoration and furniture should convey an atmosphere of enthusiasm and relaxation to the customers; while the use of cutting-edge computers and ATM machines is also important to many customers. The tangibles dimension also covers making available a sufficient number of parking places, choosing accessible locations for new branches and ensuring that sign boards are attractive and convey the proper corporate image to the customers. In this regard, some studies have shown that technology-based services are an integral part of the tangibles dimension and have a positive

influence on perceived service quality⁴³¹ The UAE Islamic banks should therefore immediately introduce state-of-the-art technology-based services, such as advanced automatic teller machines (ATMs) which provide specialized banking services such as money transfer, settling credit card payments and applying for retail products. Further, communication refers to such services as electronic share application facilities (ESA), telephone banking, online banking and networks for electronic transfers (NETS), which are also considered a competitive advantage, and it is recommended that the UAE Islamic banks make these services available to their customers. Moreover, IT-based customer relation management can also be adopted by the UAE Islamic banks to enhance the quality of service and the level of customer satisfaction: for instance, automatic call distribution (ACD), computer-integrated telephony (CIT), interactive voice recognition and response (IVRR) and caller's line identification (CLI), are useful instruments that serve this purpose, their main goals being to ensure that all customers' enquiries are answered and to enable the call centre personnel in the bank to identify the customer's account number and access his file easily.

2. Enhancing the reliability items means that a bank's employees should be able to fulfil their promises, and be accurate and trustworthy while processing customers' applications. Reliability also means that the bank's employees appear knowledgeable and empowered in answering customers' enquiries and dealing with their complaints. To be able to achieve this level of reliability, the setting up of service quality information systems (SQIS) is recommended for the UAE Islamic banks. The main function of the SQIS is to handle research and development activities, carry out surveys related to measuring service quality and provide feedback to the bank's management. In this regard, the following are suggested approaches that might be used by the UAE Islamic banks:

⁴³¹ Zhu, 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.

- i. Random customer surveys, which can be used to measure overall service quality and customer satisfaction.
- ii. Company-wide attitude surveys, which are designed to measure the satisfaction of both customers and employees.
- iii. Lost account surveys might be conducted via interview and telephone conversation with customers who have left the bank.
- iv. Target account surveys focus on particular segments such as youth or female customers.
- v. Customer exit surveys, which are aimed mainly at those customers who physically visit the bank, and which are designed to obtain fresh and immediate feedback about the quality level of the service that the customer has just received.⁴³²

In addition, many useful tools may be used to analyse the customers' feedback on the level of service quality, including:

- i. Questionnaires, which include telephone surveys, SERVQUAL, Mystery shopper, focus groups with customers.
 - ii. Interviews, which include face-to-face interviews, call centre telephone interviews, key-client group interviews with clients, customer councils, customer advisory panels.
 - iii. Service quality index and customer satisfaction index to monitor service quality and level of customer satisfaction, and to establish a benchmark from which to compare the bank's performance with that of its competitors.
3. Improving the empathy dimension means locate the branches and ATMs where there is easy access for the customers and bank's employees will have the appropriate knowledge and be able to express courtesy to their customers. Also, a bank's employees should have the ability to offer personal interest and confidentiality to customers by means of their competence, courteousness, awareness of privacy, credibility and effective communication. In this regard, it is suggested that the UAE Islamic banks consider the following recommendations:

⁴³² Bailey, Keith and Karen Leland, *Customer service for dummies*, IDG Books Worldwide, California, 1995, pp. 121-124.

- i. Develop professional training programmes such as extensive in-house training programmes for those of their employees who have been attracted from conventional banks and lack knowledge of the Islamic *Shari'ah*. These training programmes will give the service providers a solid background in Islamic banking principles which will underpin their managerial ability to apply the characteristics of Islamic banks to business transactions and to give their customers accurate advice.⁴³³
- ii. Recruit highly qualified human resource directors who have a solid background in Islamic banking and *Shari'ah* jurisprudence and who are thus able to prepare training programmes, set self-development plans for employees and develop strategic planning for managers.

9.4 The Preferences of the Customers of the UAE Islamic Banks

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.⁴³⁴

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

⁴³³ Rice, Gillian and Essam Mahmoud, "Integrating quality management: Creativity and innovation in Islamic banks", *Lariba 8th Annual International Conference*, American Finance House, Pasadena, California, June 16, 2001.

⁴³⁴ 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.

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).⁴³⁵

9.5 The Relationship between Successful Service Quality and Management Functions

This study has shown that a poor quality of service results from a lack of managerial competence. On account of this, management restructuring and organizational re-engineering are recommended in order to enhance the ability of the UAE Islamic banks to neutralize the competition in the market. It is suggested that the management of the UAE Islamic banks be service quality-oriented rather than banking function-oriented, and that its practices should reflect its genuine commitment to implementing service quality programmes by supporting the rewards system and allocating enough funding resources to serve this purpose. It is recommended that the following steps be followed in order to improve managerial practices in the UAE Islamic banks:

1. The study's findings confirm those of other studies, that the UAE Islamic banks suffer from organizational difficulties.⁴³⁶ For instance, the organization chart appears old-style and hierarchal, it is characterized by large numbers and complicated management levels and communication channels, which explains the existence of the lack of empowerment, role ambiguity, long procedures and redundant paperwork.⁴³⁷ It is therefore suggested that Islamic banks in the UAE implement a modern organization chart which is based on acceptable levels of authorization and delegation of responsibilities, and essential upward and downward communications.
2. Top management should seek out, stimulate and facilitate the flow of information from front line employees in order to strengthen upward communication. It is recommended that executive managers sit with

⁴³⁵ 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.

⁴³⁶ Al-Hassani, Erfan, "Lights on Islamic finance forum", *Al Khaleej Newspaper*, No. 9090, UAE, 8 April, 2004, p. 9.

⁴³⁷ Structured interview with Mr. Saad Abdul Razzaq, Chief Executive Officer, Dubai Islamic Bank, Dubai, 6 December 2004.

front liners periodically and even work side by side with them. Also, Islamic banks' managements are encouraged to enhance the communication between advertising departments and those employees who come into contact with customers, and to avoid exaggeration in advertisements. Ultimately, the establishing of efficient lines of communication and coordination, such as cross-functional, horizontal and vertical communication, is the only effective way to enhance communication and spread service quality standards.⁴³⁸

3. The banks should work to minimize the number of levels of management, as the large number of managerial levels between bottom and top management results in miscommunication owing to misinterpreted information being passed between levels; this is a sign of bureaucracy and underdevelopment. The UAE Islamic banks' management should work on eliminating the barriers between employees and company departments; this may be accomplished in many ways, such as eliminating some of the organizational levels, which will enable the bank's management to become much closer to its customers and better understand their needs and expectations.
4. Goal setting must consider the customer's needs, and employees should be involved in the goal setting process to avoid employee-related problems in the implementation stage which might include resistance, resentment, absenteeism and a high staff turnover.
5. To overcome role ambiguity and role conflict, the UAE Islamic banks are advised to make sure that the employee and the technology fit the job. This goal can be achieved by developing an efficient rewards system and by encouraging delegation and empowerment among employees. Role ambiguity arises when employees are uncertain about their responsibilities and the assignments they are requested to execute; this confusion can be eliminated by setting up training programmes, establishing interpersonal skills workshops and ensuring the availability of up to date policies and procedures. Role conflict reflects the fact that the assignments given to employees are

⁴³⁸ Rice, Gillian and Essam Mahmoud, "Integrating quality management: Creativity and innovation in Islamic banks", *Lariba 8th Annual International Conference*, American Finance House, Pasadena, California, June 16, 2001.

very difficult to execute; in this situation support from the service department is needed to ensure that the necessary amount of time is made available for the completion of a particular volume of work, and that the number of employees is adequate. Employee job fit means that the employee has adequate skills and experience to carry out the job, while technology job fit refers to the availability and efficiency of the technology necessary for the particular job. Efficient reward systems can include financial rewards such as rewards for teams run on a monthly basis, recognition programmes and career advancement. Delegation and empowerment are crucial to the enhancement of team working and help to deal with any difficulties and problems that may arise while delivering services to customers. The bank's management should encourage front line employees in the branches to recognize such problems and enable them to discuss them and implement solutions without fear of reprisal.

9.6 The Development of a Service Quality Programme in the UAE Islamic Banks

The structured interviews with senior executives and some of the *Shari'ah* board members in the UAE Islamic banks indicate that establishing a service quality department in the UAE Islamic banks is essential. The priorities of a Service Quality Department in the UAE Islamic banks will include:

1. Designing a mission statement, which must clearly outline the commitment of the bank's management to the service quality programme and also outline service quality goals that are based on customer-orientated standards.
2. Defining service quality recovery procedures and manuals and establishing service quality information systems to support the decision making process. This requires setting service quality implementation plans, and its goals include improvement of processes, setting services standards and designing rewards and recognition schemes. Some techniques the bank might use to ensure control and feedback include flowcharts for identifying failure points, control charts which illustrate performance over a specific time period and compare it with standard performance, fishbone charts which provide a cause and effect

analysis and the use of pareto analysis to identify the fundamental causes of a problem.⁴³⁹

3. Building recognition systems for service providers is an essential step before starting the operation of the service quality programme. Recognition methods may take the form of bonuses, shares, salary increments, badges of honour and appreciation certificates and trophies.⁴⁴⁰

4. Setting service quality training programmes, which should facilitate the process of change, include unfreezing processes, which provide employees with adequate information to be able to change, and re-freezing processes, which means stabilizing the process of change in the long term.⁴⁴¹

5. Identifying service defenders in the top management is an important function of a service quality department; their function is to protect culture-change processes from the resistors and maintain support and credibility in the service improvement efforts.

6. Selecting the service champions who set the plans and supervise the implementation of service improvement.⁴⁴² The service quality defenders and champions should form a steering committee, a quality implementations team and a quality council, whose responsibilities include ensuring the existence of resources, communication, business and quality plans, assessing progress and ensuring recognition and rewards.

7. Selecting a quality leadership team (QLT) to lead the service quality programme, supervise the service quality training plan, ensure development, hold the proper quality documentation, which include the quality strategy, goals, objectives, measurements, values and training programmes, and build quality indicators, indexes and feedback systems. Also, the service quality leadership team should assign a key contact person (KCP) in each branch to strengthen the relationships with the bank's customers.⁴⁴³

⁴³⁹ Bailey, Keith and Karen Leland, *Customer Service for Dummies*, IDG Books Worldwide, California, 1995, pp. 157-178.

⁴⁴⁰ Rice, Gillian and Essam Mahmoud, "Integrating Quality Management: Creativity and Innovation in Islamic Banks", *Lariba 8th Annual International Conference*, American Finance House, Pasadena, California, June 16, 2001.

⁴⁴¹ Yavas, Ugur, et al., "Relationships between service quality and behavioural outcomes: A study of private bank customers in Germany", *International Journal of Bank Marketing*, Vol., 22, No. 2, 2004, pp. 144-157.

⁴⁴² Zeithaml, Valarie, et al., *Delivering quality service: Balancing customer perceptions and expectations*, New York: The Free Press, 1990, pp. 145-149.

⁴⁴³ The Ernst & Young, Quality Improvement Consulting Group, *Total quality: A manager's Guide for the 1990s*, Kogan Page, London, 1992, pp. 167-168.

9.7 The Importance of Islamic Banking Variables

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.

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. *Shari'ah* board alliances and collaboration are vital requirements in modern Islamic banking, and will enable the banks to conform to international banking standards and to operate globally. Also, the *Shari'ah* board must be independent and have a high level of transparency, together with a uniformity of decisions and scholars' opinions. In this regard, Islamic banks in the UAE are advised to comply with the AAOIFI and IFSB standards and other decisions of the Islamic Fiqh Academy, such as the decisions of the Islamic Conference Organization. In addition, adopting training programmes for *Shari'ah* auditors and adapting restricted recruiting criteria will enhance professionalism.
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:

- a. The human resources 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.
3. 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-term and long-term 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. The following are promising products which the UAE Islamic banks might use to overcome some of their financial difficulties:
- a. The financial analysis in this study showed that liquidity management is the major problem facing the UAE Islamic banks. The UAE Islamic banks could manage liquidity efficiently by following the recommendations below:
 1. The Islamic security market could provide profitable liquid assets to replace the interest-based inter-bank deposit

finance and bridge the gap in liquidity management.⁴⁴⁴ Examples of Islamic security products are *Ijarah*, *Musharakah* and *Mudarabah Sukuk*, inter-bank debt certificates, and government debt certificates. These products may be securitized in the form of negotiable *Sukuk* and exchanged in secondary markets such as the Abu Dhabi Stock Market, the Dubai Stock Market and the Dubai International Stock Market. The negotiable *Sukuk* will provide Islamic banks in the region with liquidity when needed.

- II. The *Mudarabah* Inter-bank Instrument will enable Islamic banks, when facing a liquidity shortage, to obtain funds from other banks that have surpluses. The *Mudarabah* Inter-bank Instrument Certificate is issued for a fixed period and matures over time; it can be issued for a 12-month maturity, the profit rate is predetermined and the principal is paid on maturity.
- b. The financial analysis in this study also showed that the financial risk and exchange rate fluctuation risk that are related to profit participation models such as *Musharakah* and *Mudarabah* are the major difficulty which prevent the Islamic banks from using these models extensively. The UAE Islamic banks could mitigate the financial risk and exchange rate fluctuation risk related to *Mudarabah* and *Musharakah* by considering the following recommendations:
 - I. Develop credit management techniques which include: conducting professional credit analyses of a business firm's profile and achievements, building screening and monitoring systems, setting rating criteria, creating ethical business standards and eliciting periodical financial reports from independent auditing firms.⁴⁴⁵

⁴⁴⁴ Wilson, Rodney, "The evaluation of the Islamic finance systems", Simon Archer and Rifaat A. Abdel-Karim (eds.), *Islamic finance: Innovation and growth*, Euromony Books and AAOIFI, London, 2004, pp. 35-36.

⁴⁴⁵ Wilson, Rodney, "The Interface between Islamic and conventional banking", Munawar Iqbal and David T. Llewellyn (eds.), *Islamic banking and finance*, Edward Elgar, Cheltenham, 2002, p. 201.

- II. Adopt diversification in a *Musharakah* portfolio by establishing mutual funds based on assets and the funds obtained through *Musharakah* or *Ijarah*. The investment will be mainly in the form of tangible assets and the fund capital is divided into small units in the form of negotiable certificates. An Inter-Islamic Bank Rate (IIBR) could be created to replace the LIBOR rate based on the negotiation of *Musharakah* or *Ijarah* certificates.⁴⁴⁶
 - III. Make provision for product diversification through entering into transactions with public and private projects in the UAE, where infrastructure projects such as transportation, construction, electricity, gas and oil discovery, and water desalination are very promising.⁴⁴⁷
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.

9.8 The Relationship between *riba* and Service Quality Dimensions

The relationship between *riba* and service quality dimensions in the UAE Islamic banks was found to be positive, which confirms the findings of other

⁴⁴⁶ Usmani, Muhammed Taqi, *An introduction to Islamic finance*, Kluwer Law International, The Netherlands, 2002, pp. 48-49.

⁴⁴⁷ Ibid.

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.

9.9 Development of Customers' Familiarity with Islamic Banking Products and Services

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.

9.10 Enhancing the Social Responsibilities of the UAE Islamic Banks

Participation in social development is considered an integral part of Islamic bank activities. Islamic banks in the UAE are therefore encouraged to implement the following projects:

1. Emiratization programme to increase the number of UAE nationals among middle and top management employees, as currently the majority are expatriates, especially within head office departments such as risk management, investment, auditing and finance. As yet, the Emiratization programme that is supported by the UAE Central Bank is not implemented all across the board by Islamic banks in the country.⁴⁴⁸
2. Islamic banks in the UAE are encouraged to distribute credit equitably among the country districts and the rural areas and avoid investing only in major cities.
3. *Qard-al-hassan* and *Zakah* must be used in developing the economy of poor families, and social security should be provided for them in the form of educational scholarships and health service donations.
4. The Islamic banks in the UAE should broaden public participation in general assembly meetings by allowing investment accounts holders to participate. This step will ensure an equitable distribution of profits between the shareholders and the investment accounts holders, and will enhance trust and goodwill, and may be accomplished by nominating a representative chosen at random from the investment accounts database of the bank, or the UAE Central Bank could be invited to participate on behalf of the investment accounts holders.
5. Islamic banks should direct some of their investments towards small and medium sized industrial ventures, such as those of craftsmen and entrepreneurs, through *Mudarabah*, which is suited to these categories of finance seekers who often lack the collateral necessary to obtain conventional loans.⁴⁴⁹

⁴⁴⁸ Structured interview with Mr. Ali Bin Zayed, Deputy Governor of the UAE Central Bank, Dubai, 31 January 2005.

⁴⁴⁹ Abdul-Ghafoor, A. L. M., *Participatory financing through investment banks and commercial banks*, Apptec Publications, The Netherlands, 1996, p.31.

9.11 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.

9. 12 Closing Remarks

The challenges confronting the UAE Islamic banks include existing competitors, customer negotiating power, new entrants and corporate governance. To meet the challenge of competition the UAE Islamic banks must achieve a high performance that is based on Islamic business ethics, maintain a customer satisfaction culture, develop customer loyalty programmes, develop new substitutes for conventional products and services, enhance the perceived service quality to retain existing customers and attract fresh customers, improve the operation processes to satisfy customers' needs, introduce a benchmarking

function, build up industry intelligence and indices, and improve organizational structure.

Ultimately, developing effective marketing strategies and increasing market share should be an important priority of the UAE Islamic banks, which can be achieved through endeavouring to provide a high level of service quality, while at the same time assuring customers that all banking activities are authorized by a trustworthy *Shari'ah* board which will legitimize the operations of these banks.

As evidenced by this study, Islamic banking variables which 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, competitive return on investment accounts, the availability of banking services and the trustworthiness of the *Shari'ah* board play pivotal role in forming customer perception toward the level of service quality in Islamic banks, The mission statements of Islamic banks and business strategies should, therefore, reflect their commitments to the provision of such high level Islamic banking and functional variables.

In concluding, while Islamic banks have achieved much in their first thirty years, it is important that they should support research and development activities to consolidate their place in the financial world. This study should, therefore, be seen as a contribution in that direction.

APPENDICES

Appendix A

Federal Law no- (6) of 1985 Regarding Islamic Banks, Financial Institutions and Investment Companies

We, Zayed Bin Sultan Al-Nahyan, President of the United Arab Emirates, Having Perused the Provisional Constitution and, Federal Law No (1) of 1972, regarding jurisdictions of the Ministries and powers of the Ministers, and amending laws thereof, and, Federal Law No- (7) of 1976 on the establishment of the State Audit Bureau, and , Union Law No (10) of 1980, regarding the Central Bank, the Monetary System and Organization of Banking and amending laws thereof, and, Federal Law No (8) of 1984 regarding commercial companies, and, In accordance with presentations by the Minister of Finance and Industry, endorsed by the Cabinet and the National Federal Council and ratified by the Supreme Union Council , Promulgate the following Law:

Article (1)

Islamic banks, financial institutions and investment companies shall mean those whose articles and memorandums of association include a commitment to abide by the provisions of the Islamic Sharia'h Law, and conduct their activities in accordance therewith.

Article (2)

Islamic banks, financial institutions and investment companies shall be established in the country and carry on their activities in accordance with the provisions hereof. In respect of whatever is not particularly provided for herein, these banks, institutions and companies shall be subject to the provisions of Union Law No (10) of 1980 , Federal Law No (8) of 1984 previously referred to, and other established laws and regulations and prevailing practices.

Those banks, institutions and companies shall take the form of public joint stock companies, and shall be established in accordance with the provisions of Federal Law No (8) of 1984 previously referred to. These banks, institutions and companies shall be subject to the Central Bank's licensing, supervision and inspection in accordance with the provisions of Union Law No (1) of 1980, and in a manner not contravening the provisions hereof.

With the exception of those relating to establishment, the provisions stipulated in previous items shall apply to all branches and offices established in the country by foreign Islamic banks, financial institutions and investment companies.

Article (3)

Islamic Banks shall have the right to carry on all or part of banking, commercial, financial and investment services and operations. They shall also have the right to engage in all types of services and operations practised by banks and referred to in Union Law No (10) of 1980 and without adherence to the periods stipulated therein, whether those operations and services were conducted for the Islamic Bank's own account or for or in partnership with a third party. Islamic banks shall also have the right to establish companies and participate in existing enterprises or those under establishment provided that activities of the latter are in conformity with Islamic Sharia'h Law .

Islamic financial institutions and investment companies shall have the right to carry out lending, credit and other financial operations. They may also participate in existing enterprises or those under establishment, invest their funds in moveable assets and receive deposits for investment thereof in accordance with provisions of Islamic Sharia'h Law.

Article (4)

Islamic banks, financial institutions and investment companies incorporated in the country, along with branches and offices of foreign Islamic banks, financial institutions and investment companies licensed to operate in the country shall be exempted from provisions of Clause (a) of Article (90) and Clause (e) of

Article (96) of Union Law No (10) of 1980. Those agencies shall also be exempted from provisions of Clause (b) of Article (90) of Union Law No (10) of 1980 and in a manner not contravening with established legislation in the concerned emirate.

Article (5)

A Higher Sharia'h. Authority shall be formed by a cabinet decision, incorporating Sharia'h, legal and banking personnel to undertake higher supervision over Islamic banks, financial institutions and investment companies to ensure legitimacy of their transactions according to the provisions of Islamic Sharia'h Law, and also to offer opinion on matters which these agencies may come across while conducting their activities. The opinion of the said Higher Authority shall be binding on the said agencies. This Authority shall be attached to the Ministry of Justice and Islamic Affairs.

Article (6)

The respective articles and memorandum of association of each Islamic Bank, financial institution and investment company should clearly stipulate that a Sharia'h Supervision Authority shall be formed of a minimum of three members to render their transactions and practices in accordance with the principles and provisions of Islamic Sharia'h Law. The respective articles of association of each of these agencies shall determine the way in which this authority shall be formed, the manner in which it will discharge its tasks and its other terms of reference. Names of members of the Sharia'h Supervision Authority shall be presented to the Higher Authority referred to in the previous article for approval prior to issuance of the formation decision.

Article (7)

In case an Islamic bank, financial institution or investment company is subject to the State Audit Bureau's control as per provisions of Federal Law No (7) of 1976; the Bureau's mission shall be confined to post-audit. The Bureau may not interfere in the process of works of these agencies nor challenge their policies .

Article (8)

Islamic banks, financial institutions and investment companies, along with branches and offices of foreign Islamic banks, financial institutions and investment companies which are existent at the time this law comes into effect, should reconcile their positions with the provisions hereof within one year from date of enforcement thereof.

Article (9)

Ministers and competent authorities in the UAE shall within their respective jurisdictions implement the provisions hereof.

Article (10)

This law shall be published in the Official Gazette and shall come into effect from date of publication thereof.

Zayed Bin Sultan Al Nahyan
President of the United Arab Emirates

Issued by us in the Presidential Court -Abu Dhabi
On: 3 Rabiya Al Akher 1406 Hijri
Corresponding to: 15 December 1985

Appendix B

Dear Sir;

This survey is intended to measure the perceived service quality of your Islamic bank and will constitute a significant contribution to academic and practical efforts to develop Islamic banking. I certify that all information obtained from the questionnaire will be kept confidential and used only for scientific research purposes.

Part 1

Please circle the following statements related to your feelings or perceptions about the Islamic bank you deal with. For each statement, please show the extent to which you believe the Islamic bank you deal with has that feature: (5) means that you strongly agree, (4) agree, (3) neutral, (2) disagree, while (1) means you strongly disagree.

1	Tan	Islamic bank I deal with has state of the art technology such as computers and ATMs.	1	2	3	4	5
2	Tan	Islamic bank I deal with has enough parking spaces and accessible location.	1	2	3	4	5
3	Tan	Islamic bank I deal with has convenient interior design and facilities that enable me to be served in a short time with a high level of privacy.	1	2	3	4	5
4	Tan	The brochures and forms produced by the Islamic bank I deal with are clear and easy to understand.	1	2	3	4	5
5	Tan	Islamic bank I deal with looks attractive from the outside.	1	2	3	4	5
6	Rel	The advertised promises of the Islamic bank I deal with are consistent with its performance.	1	2	3	4	5
7	Rel	The employees of the Islamic bank I deal with always solve my problem promptly and sincerely.	1	2	3	4	5
8	Rel	My business transactions and statement of accounts in the Islamic bank I deal with are always accurate and error-free.	1	2	3	4	5
9	Rel	My application processes in the Islamic bank I deal with are always done on time.	1	2	3	4	5
10	Rel	Cash is always available at the ATM machine of the Islamic bank I deal with.	1	2	3	4	5
11	Ass	The number of employees in the Islamic bank I deal with is adequate and they have appropriate delegated responsibilities and empowerment to solve my problems instantly.	1	2	3	4	5
12	Ass	The employees of the Islamic bank I deal with always appear willing to serve and honour their promises.	1	2	3	4	5
13	Ass	The employees of the Islamic bank I deal with are always neat and courteous.	1	2	3	4	5
14	Ass	The employees of the Islamic bank I deal with always appear highly knowledgeable and well trained.	1	2	3	4	5

15	Ass	The employees of the Islamic bank I deal with instil trust and confidence.	1	2	3	4	5
16	Emp	The employees of the Islamic bank I deal with are always listening carefully to my complaints and opinions.	1	2	3	4	5
17	Emp	The branches of the Islamic bank I deal with are easily accessible.	1	2	3	4	5
18	Emp	The ATM machines of the Islamic bank I deal with are easily accessible.	1	2	3	4	5
19	Emp	The employees of the Islamic bank I deal with give clear and precise answers to my inquiries	1	2	3	4	5
20	Emp	The employees of the Islamic bank I deal with have the interests of their customers at heart.	1	2	3	4	5
21	Emp	The opining hours of the Islamic bank I deal with are very convenient.	1	2	3	4	5
22	Res	The employees of the Islamic bank I deal with answer telephone calls promptly.	1	2	3	4	5
23	Res	The employees of the Islamic bank I deal with are willing to help.	1	2	3	4	5
24	Res	Services are provided promptly at the Islamic bank I deal with.	1	2	3	4	5
25	Res	The responses to my requests for financing at the Islamic bank I deal with are always encouraging.	1	2	3	4	5
26	Isb	All financings provided by the Islamic bank I deal with are in harmony with Islamic Shari'ah.	1	2	3	4	5
27	Isb	All banking services provided by the Islamic bank I deal with are in accord with Islamic Shari'ah.	1	2	3	4	5
28	Isb	The employees in the Islamic bank I deal with are aware of Islamic Shari'ah terms and conditions that are related to the products and service provided.	1	2	3	4	5
29	Isb	The credit facility that is based on profit and loss sharing is available in the Islamic bank I deal with.	1	2	3	4	5
30	Isb	The services fees of the Islamic bank I deal with are inexpensive	1	2	3	4	5
31	Isb	The Islamic bank I deal with pays competitive return on the investment deposits.	1	2	3	4	5
32	Isb	Most banking services I need are available in the Islamic bank I deal with.	1	2	3	4	5
33	Isb	The profit rate on finance in the Islamic bank I deal with is inexpensive.	1	2	3	4	5
34	Isb	All deposits accounts provided by the Islamic bank I deal with are in harmony with Islamic Shari'ah.	1	2	3	4	5
35	Isb	The Islamic Shari'ah board in the Islamic bank I deal with is well known and trustworthy.	1	2	3	4	5
36	ost	Overall, I am very satisfied with banking service quality in the Islamic bank I deal with.	1	2	3	4	5
37	ost	I would recommend the Islamic bank I deal with to my friends and family members.	1	2	3	4	5
38	rib	I deal with an Islamic bank only to avoid taking or paying interest.	1	2	3	4	5

Part 2

Please circle the following statements related to **your familiarity with products and services of the Islamic bank** you deal with. For each statement, please show the extent to which you believe that you are familiar with each product and service feature, where (5) means that you are very familiar, (4) familiar, (3) not very familiar, (2) unfamiliar, while (1) means you do not have any knowledge about them.

No	Statement	Zero knowledge	Not familiar	Poor familiar	Familiar	Strongly familiar
1	Current account	1	2	3	4	5
2	Saving account	1	2	3	4	5
3	Investment deposit	1	2	3	4	5
4	Credit card	1	2	3	4	5
5	Cheque collection	1	2	3	4	5
6	Letter of guarantee	1	2	3	4	5
7	Letter of credit	1	2	3	4	5
8	Car finance by Murabaha	1	2	3	4	5
9	Goods finance by Murabaha	1	2	3	4	5
10	Construction finance by Istisna	1	2	3	4	5
11	Trade finance by foreign Murabaha	1	2	3	4	5
12	Service finance such as Medical, Education and travel by Service Ijarah	1	2	3	4	5
13	Projects finance by Murabaha	1	2	3	4	5
14	Projects finance by Musharakah	1	2	3	4	5
15	Real-estate and equipment finance by Ijarah	1	2	3	4	5

Part 3

Bank: Dubai Islamic Bank Abu Dhabi Islamic Bank Sharjah Islamic Bank.

Location: _____ **Gender:** Female Male

Martial status: Married Not Married

Age: _____ **Nationality:** _____ **Your work position:** _____

Your Company segment: Employee in Government Employee in Private sector
 Manage my own business

Education: Below High School High school Holder Higher Diploma
 4 Years college and university graduate Master or PhD

Monthly Income: Less than 3000 3001 – 5000 5001-10000
 10001-17000 More than 17000

Do you have an account with another non-Islamic bank? No Yes
How long have you been dealing with this bank? _____ Years

THANK YOU

Appendix C

STRUCTURED INTERVIEWS

Structured interview with Dr. Jassim Al Shamsi, Shari'ah Board Member, Abu Dhabi Islamic Bank, Dubai, 31 January 2005.

Structured interview with Dr. Mohammed Zuair, Head of Shari'ah Control Department, Dubai Islamic Bank, Dubai, 31 January 2005.

Structured interview with Mr. Abdul Naser Al Mannai, Head of Shari'ah Supervision, Sharjah Islamic Bank, Sharjah, 10 May 2005.

Structured interview with Mr. Ali Bin Zayed, Deputy Governor of the UAE Central Bank, Dubai, 31 January 2005.

Structured interview with Mr. Majdi Al Rifai, Branches Operation, Abu Dhabi Islamic Bank, Abu Dhabi, 27 December 2004.

Structured interview with Mr. Saad Abdul Razzaq, Chief Executive Officer, Dubai Islamic Bank, Dubai, 6 December 2004.

Structured interview with Mr. Saeed Al Qamzi, General Manager, Sharjah Islamic Bank, Sharjah, 8 May 2005.

Structured interview with Mr. Saleh Allaw, Head of Research and Statistics, the UAE Central Bank, Abu Dhabi, 17 April 2005.

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