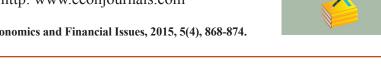


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# A Comparative Study of Financial Performance between **Conventional and Islamic Banking in United Arab Emirates**

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#### ABSTRACT

The purpose of this study is to compare the financial performance of two UAE based Islamic and conventional banks between the years 2002 and 2006. Quantitative analysis was undertaken by looking at various sets of financial ratios that are routinely used to measure bank performance. The main ratios that were employed put a particular focus on the banks liquidity, profitability, management capacity, capital structure and share performance as reliable indicators of a bank performance. Descriptive statistical analysis was used to rank the performance, measuring the dispersion and the stability-variability of the indicators. The research goes one step further and measures the financial stability of the two banks. Conclusions were then drawn from the computation of the relevant ratios that allowed the author to make an effective comparison of said banks. Subsequently, each bank's performance was then ranked via the use of descriptive statistical analysis. This type of analysis was used to summarize the performance of each bank based on three criteria, mean, coefficient of variation and the overall stability of each banks performance. The findings showed that both banks performed reasonably well during the period studied. While the bank of Sharjah benefitted by having an overall higher degree of liquidity, profitability, management capacity and capital structure. Dubai Islamic bank was better off in relation to share indicators performance and in terms of overall stability.

Keywords: Banking, Financial Analysis, Performance Measurement, Financial Ratios, United Arab Emirates JEL Classifications: E44, G21, M40

# **1. INTRODUCTION**

A commercial bank's performance is evaluated for several reasons depending on personal objectives. An entity like a bank regulator, for example, may need to identify and call attention to banks that are experiencing chronic financial problems in order that they may fix them before they get out of control. Such is the case with so called "bank runs." Shareholders, on the other hand need to assess which banks they can deem suitable to financially invest in. Unsurprisingly, commercial banks evaluate their own performance over a given period so that they may determine the efficacy and long term viability of management decisions or goals so that they can alter the course and make changes whenever it is appropriate. With a constant and routine monitoring of performance, underlying problems may remain invisible and lead to financial failures further down the line.

The overall objectives of this research is to measure the performance of two leading private sector commercial banks using five groups of financial ratios that will indicates the performance developments over the period 2002-2006. Moreover, the study will make comparative assessment of the performance between two banks, conventional bank and Islamic bank. Furthermore, the research is going to measure the overall stability of each bank.

To measure the financial performance and make a comparison between Dubai Islamic bank and bank of Sharjah, the research is going to use five main groups of parameters. In each group, different ratios are going to employee to measure the performance. These ratios are going to be ranked for comparison purpose. The data for this research was obtained from Abu Dhabi financial service company. The descriptive measurements are going to be used to measure the performance and the stability-variability of these ratios over the years 2002-2006. Moreover, Z-Score indicator is going to be used to measure the overall stability of each bank.

# **2. LITERATURE REVIEW**

## **2.1. Conventional Banks**

Misra and Apa (2013) analyzed the financial position and performance of the state bank group using camel model. They tested their hypothesis on six banks on the basis that there is no significant difference in performance using twenty financial ratios. Their findings showed that different banks obtained different ranks with respect to camel ratios. Their study also depicted that thought ranking of ratios is different for different banks in state group. But there is no statistically significant difference between banks the camel ratios. It signifies that overall performance of state group is same.

Kumbrai et al. (2010) investigated the performance of South Africa's commercial banking sector for the period 2005-2009. They use financial ratios to measure the profitability, liquidity and credit quality performance of five large South African based commercial banks. The results showed an improvement in the bank performance in terms of profitability, liquidity, and credit quality from 2005 to 2007. They also found significant differences in profitability performance for the period 2005-2006 and the period 2008-2009.

Tuna (2013) tried to measure the financial health of two banks in Indonesia for the period of 2008-2012, using five assessment aspects of the camel model (Capital, Asset, Management, Earnings, and Liquidity). The t-Test has been used to assess the differences between the two banks. The results in this research found no significant differences about bank soundness between the two banks.

Gupta (2014) evaluated the performance of public sector banks in India. He used camel approach for a 5-year period 2009-2013. The results showed that there is a statistically significant difference between the camel ratios of all the public sector banks in India. Therefore, the overall performance of public sector banks is different.

To identify selected determinants of profitability in six major European banking sectors, Goddard et al., (2004) used crosssectional, pooled cross-sectional time series and dynamic panel models. They analyzed data on 665 banks from six European countries for the period 1992-1998. The results of the empirical analysis suggest that, despite the growth in competition in European financial markets, there is still significant persistence of profit from 1 year to the next.

Al Tamimi (2010) investigated some influential factors in UAE's Islamic and conventional national banks during the period 1996-2008. Two dependents variables were used separately against five independent variables which are the financial development indicator, liquidity, concentration, cost, and branch number in using regression analysis. His analysis showed that liquidity is most influential factor for conventional banks. For Islamic banks, his results stated that the influential factors are the cost and the branch number.

Tarawneh (2006) analyzed the financial statement of five Omani banks for the financial period 1999-2003. In addition, he used simple regression to estimate the impact of asset management, operation efficiency, and bank size on the financial performance of these banks. The results showed that financial performance of the banks was strongly and positively influenced by the operational efficiency, asset management, and bank size.

Jha and Hui (2012) compared the financial performance of different structured banks in Nepal using camel framework. The study covered the years 2005-2010 to assess the financial performance of the eighteen commercial banks in Nepal. The analysis was based mainly on the descriptive financial analysis to describe, measure, compare, and classify the financial situations. The authors then used multivariate regression model to test the significance of the variables used. They found that return on assets (ROA) of public sector banks were higher than those of joint venture and domestic public banks. Moreover, the values determined for the financial ratios revealed that joint venture and domestic public banks were also not so strong in Nepal to manage the possible large-scale shock to their balance sheet.

Ferrouhi (2014) analyzed the performance of major Moroccan financial institutions for the period 2001-2011 using camel approach. He used one financial ratio for each of capital adequacy, assets quality, management quality, earning ability, and liquidity position measures. The testing of the above measurements on six Moroccan institutions revealed that all the six banks did well over the period of study. His findings were based on ranking the average of each ratio, showed that some banks are better off than others.

Ibrahim (2014) analyzed the financial performance of two UAE based banks between the years 2004 and 2009, by looking at various set of ratios that are used to measure the bank performance. The analysis revealed that both banks did well over the above period, each bank scored high level of performance in one area than another.

## 2.2. Islamic Banks

Ahmed (2010) investigated the performance of Islamic banks in Pakistan. In this study, Ahmed applied non-financial measures based on an eight item scale to sasses the performance of the Islamic banks. He selected six full-fledged Islamic banks and measured their performance by using modified version of an eightitem research instrument developed by Quinn and Rohrbaugh (1983). The responses were recorded regarding bank performance by considering different aspects. Every respondent was asked to rank a number of aspects regarding his/her bank. These responses were recorded from 432 bankers through simple random sampling technique. The results show that bankers consider product quality, profitability, and productivity as more important indicators of performance with increasing evolution towards these items. The personnel voluntary rotation and personnel absenteeism are ranked low due to decreasing evolution among bankers.

Abduh et al. (2013) investigated the efficiency and performance of five Islamic banks in Bangladesh. Their data were collected through the published annual reports of the five banks from the year of 2006 to 2010. To measure the efficiency and performance, the researchers used ratio analysis for measuring the performance and data envelopment analysis with Malmquist Index to measure the efficiency of the Islamic bank. The result concludes that Shajalal Islamic bank has performed better than other Islamic banks in terms of ratio analyzed. The result of Data envelopment analysis reveals that the trend of all Islamic banks was on the rising stage during year 2006 to year 2010, suggesting that the Islamic banks have improved their efficiency over the study period.

Ibrahim et al. (2014) have used financial data obtained from the annual reports of the sample banks the study has evaluated the performance of six Islamic banks listed at both Dhaka Stock Exchange and Chittagong Stock Exchange. Their objectives were to evaluate the performance of these banks, and to make a comparison among different Islamic banks from different variables. The results show that some banks are better off than others using different ratios. The overall performance of all Islamic banks is satisfactory. The researchers believe that the future of Islamic banking system in Bangladesh is very bright. But for exploring the market opportunity the Islamic banks must develop market driven strategy.

Yudistira (2004) used data envelopment analysis technique to create a frontier set by efficient banks and compare it with inefficient banks to produce efficiency scores. The researcher found that the overall efficiency across 18 Islamic banks is small at just over 10%, which is quite low compared to many conventional counterparts. Islamic banks in the sample suffered from the global crisis in 1998-1999, but performed very well after the difficult periods. Moreover, the findings indicate that there are diseconomies of scale for small-to-medium Islamic banks.

Sanwari and Zakaria (2013) studied the Islamic bank performance in relation to the effect of both internal conditions and the external factors on Islamic banks performance. Global Islamic banks' data were obtained from the annual report on Islamic banking from Bank Scope database. Panel data of 74 Islamic banks from around the world was examined for the period 2000-2009. Their findings revealed that the performance of these banks depends more on bank specific characteristics such as capital, assets quality and liquidity, while macroeconomic factors do not significantly influence Islamic banks' profit.

Akhter et al. (2011) measured the efficiency of Islamic bank in relation to two conventional banks in Pakistan. They used the financial ratios to measure profitability, liquidity risk and credit risk for the years 2006-2010. Trend analysis was also used to check the trends of the balance sheet and income statement numbers. Their findings conclude that no significant difference is observed between the two types of banks in respect of profitability and a divergence in liquidity and credit performance. The trend analysis showed a good trend of balance sheet of the Islamic bank while in income statement, there was no meaningful difference.

Miniaoui and Gohou (2011) examined the performance of the main Islamic banks. They used the balance sheets data for 37 banks of the UAE. Their main purpose was to assess the magnitude of the gap between the conventional and the Islamic banking systems using conditional and unconditional methodology. They analyzed two sets of indicators related to profitability and productivity. They found that conventional banks in the UAE performed better than the Islamic one.

Cihak and Hesse (2010) assessed the relative financial strength of Islamic banks. Using Z-score as a measure of stability on individual Islamic and commercial banks in 19 banking systems, their findings were as follows:

- 1. Small Islamic banks tend to be financially stronger than small commercial banks
- 2. Large commercial banks tend to be financially stronger than large Islamic banks
- 3. Small Islamic banks tend to be stronger than large Islamic banks.

Husein (2014) analyzed the data of 102 individual Islamic banks in Indonesia over the period 2010-2012. His objective was to investigate whether the bank size has significant effect on risk using the z-score as a measure of stability. The research findings were as follows:

- 1. The banks size has significant difference in terms of its stability
- 2. Overall, Islamic bank stability is affected by the assets and income diversity
- 3. Large Islamic banks tend to be financially stronger than small Islamic banks
- 4. Small banks tend to be more stable than medium Islamic banks.

Ibrahim (2015) measured the financial performance of two Islamic banks in United Arab Emirates for the period of 2003-2007. Different groups of financial ratios have been used to measure the performance and make a comparison between these two banks. Although, the results showed that both banks did well, it appears that each bank has its focus on some area such as liquidity, profitability, capital structure and stability.

## 2.3. Comparative Studies

Olson and Zoubi (2008) distinguished between conventional and Islamic banks in the Gulf Cooperation Council region on the basis of financial characteristics alone. They put 26 financial ratios into logit, neural network and K-means nearest neighbor classification models to determine whether these ratios distinguish between the two types of banks. Their results indicated that measures of bank characteristics such as profitability ratios, efficiency ratios, assetsquality indicators and cash/liability ratios are good discriminators between Islamic and conventional banks in the GCC region.

Abdul-Hamid and Azmi (2011) compared the financial performance between one Islamic bank eight conventional commercial banks for the period 2000-2009. The financial measurements used in this research are based on the criteria such as profitability, risk and solvency, and community involvement. The study evaluated inter-temporal and interbank performance of the pioneer of Islamic banking in Malaysia using. T-tests have been used in determining their significance. They used data for one Islamic bank for the period of 2000-2009 while the data used for eight conventional banks is from 2005 to 2009. The study found that while there is no significant difference in profitability during these two periods, Islamic bank is relatively more liquid and less risky as compared to conventional banks.

Masruki et al. (2011) analyzed and measured the performance of both Islamic and conventional banks in Malaysia over 5 years, 2004-2008. Their results should that Islamic banks have less level of profitability than its rival banks. Moreover, the results also indicated that conventional banks encountered high credit risk than Islamic banks.

# **3. LIQUIDITY ANALYSIS**

#### 3.1. Cash and Deposits to Total Assets

Based on mean measure, the below Tables 1 and 2, show that bank of Sharjah has higher level of liquidity with a mean of 38% than Dubai Islamic bank with a mean ratio of 6.99% over the years of study, as a percentage of its total assets. In addition, the standard deviation and the coefficient of variation of Sharjah bank indicate the higher stability level of this ratio over the time in Sharjah bank than in Dubai Islamic bank.

#### **3.2.** Customers Deposits to Total Assets

This ratio shows the ability of a bank to use the customers deposit to finance the bank activities. Based on the mean measure, Tables 1 and 2 show that Dubai Islamic bank depends more on customers deposits in financing its activities with a mean ratio of 81.44% thank Sharjah bank with 67.51%. On the other hand, and based on standard deviation and coefficient of variation, these tables indicate a high dispersion and instability levels of this ratio in Sharjah bank than Dubai Islamic bank.

#### Table 1: Liquidity analysis: Bank of Sharjah

# **3.3. Shareholders' Equity to Total Assets**

This ratio shows bank money as a percentage of total assets. The high ratio shows the ability of a bank to use its own money and indicates more liquidity. Based on the mean measure, the Tables 1 and 2 demonstrate that Sharjah bank is more able to use its own money with a mean percentage of 27.88% than Dubai Islamic bank with 9.5%. Thus, this bank enjoys a higher level of liquidity than its rival bank. Based on both standard deviation and the coefficient of variation, the analysis also shows that Sharjah bank has higher level of stability than the Dubai Islamic bank.

# 4. PROFITABILITY ANALYSIS

# 4.1. Return on Total Income

Return on total income ratio shows the profitability percentage generated from the activities of a bank operations. It is calculated by dividing net profit by the total income. The comparison between the two means reveals that Sharjah bank did enjoy high profitability with mean of 75.54% than Dubai Islamic bank which has a percentage mean of 29.44. This has been associated with high dispersion, and less variability level as it shown in Tables 3 and 4.

## 4.2. Return on Shareholders' Equity

This ratio shows the profitability in relation to the shareholders equity. The high ratio indicates an increase in the profitability of shareholders and presumably leads to increase the dividend level. Dubai Islamic bank higher level of profitability with a mean percentage of 17.34% comparing with Sharjah bank with 16.62%, and it may attract more investors to invest their money in this bank, especially it is associated with more stability level based on the coefficient of variation in Tables 3 and 4.

Indicators %	2002	2003	2004	2005	2006	Mean	Standard deviation	<b>Coefficient of variation</b>
Cash and deposits to total assets	35.44	44.35	36.97	43.30	30.00	38.01	5.92	15.57
Customers' deposits to total assets	79.20	66.77	68.86	64.72	58.01	67.51	7.70	11.40
Shareholder's equity to total assets	18.91	31.96	30.03	33.43	25.10	27.88	5.92	21.23

#### Table 2: Liquidity analysis: Dubai Islamic Bank

Indicators %	2002	2003	2004	2005	2006	Mean	Standard deviation	<b>Coefficient of variation</b>
Cash and deposits to total assets	6.63	6.07	7.50	9.30	5.46	6.99	1.49	21.31
Customers' deposits to total assets	86.68	87.29	81.47	77.66	74.08	81.44	5.70	6.10
Shareholder's equity to total assets	8	7.5	9.8	8.9	13.3	9.5	2.3	24.21

#### Table 3: Profitability analysis: Bank of Sharjah

Indicators %	2002	2003	2004	2005	2006	Mean	Standard deviation	<b>Coefficient of variation</b>
Return on total income	59.21	67.00	74.40	88.40	88.69	75.54	13.03	17.25
Return on shareholder's equity	14.07	9.05	13.35	31.37	15.27	16.62	8.57	51.56
Return on total assets	2.66	2.89	4.01	10.49	3.83	4.77	3.25	68.13

## Table 4: Profitability analysis: Dubai Islamic Bank

Indicators %	2002	2003	2004	2005	2006	Mean	Standard deviation	<b>Coefficient of variation</b>
Return on total income	18.12	22.88	31.36	40.40	34.48	29.44	8.95	30.40
Return on shareholders' equity	10.15	13.81	15.44	28.83	18.48	17.34	7.09	40.88
Return on total assets	0.82	1.03	1.51	2.57	2.45	1.67	0.80	47.90

## 4.3. ROA

ROA ratio shows the profitability of using the assets. The high ratio indicates the efficient use of assets to generate more profit. The low ratio may indicate that a bank has invested too much money on its assets. Based on the analysis in Tables 3 and 4, bank of Sharjah captured high level of profitability with a mean percentage of 4.77% against Dubai Islamic bank with 1.67%. But this high profitability ratio has associated with high level of variability during the year of study.

# **5. MANAGEMENT CAPACITY**

## 5.1. Total Expenses to Operating Income

This ratio shows the ability of the management in creating the revenues with certain level of expenses. It is calculated by dividing the total expenses to the income generated by a bank. The increases of this ratio from one period to another indicates that the expenses have increased at higher rate than the income did. Based on Tables 5 and 6, it is Sharjah bank managed to reduce this ratio over the years with a mean percentage of 24.46% and high level of variability with a coefficient of variation 53.27% against a mean percentage of 28.23% and 8.50% coefficient of variation for Dubai Islamic bank.

#### 5.2. Investment to Total Assets

This ratio shows the ability of bank management to allocate the appropriate amounts for investment. It is calculated by dividing the total amount invested by total assets. The high ratio will presumably create high income. The analysis in Tables 5 and 6 shows that a similar level of investment accrued, with a mean percentage of 7.66 for Bank of Sharjah and 7.63 for Dubai Islamic bank. The standard deviation and the coefficient of variance clearly indicate that bank of Sharjah has a high dispersion and variability levels in this ratio comparing the Dubai Islamic bank.

# 6. CAPITAL STRUCTURE INDICATORS

## 6.1. Total Liabilities to Total Assets

This ratio shows the portion of money financed the total assets by outsources. The higher the ratio, the more of a firm's assets are provided by creditors relative to owners. Creditors prefer a low or moderate ratio, because it provides more protection in case a firm experience financial problems. The high ratio indicates the weak financial structure. The mean percent measure in Tables 7 and 8 indicates that bank of Sharjah is structurally stronger than Dhabi Islamic bank as it has less level of ratio. On average, this ratio is 70.37% for bank of Sharjah and 90.51% for Dubai Islamic bank. But the later bank has managed to control its liabilities over the years as it has less standard deviation and coefficient of variation. Out of the above ratios, customer deposits to total assets ratio formed 67.51% for bank of Sharjah and 81.51% for Dubai Islamic. Therefore, customers' deposits is a major components of the banks' liabilities and both banks depends largely on this type of finance to run their activities.

## 6.2. Total Liability to Total Equity

This ratio the structures the relation between two types of finances, outsource finance represented by total liabilities and inside finance represented by shareholder's equity. The high ratio indicates the weak financial structure. Tables 7 and 8 demonstrate that the Dubai Islamic bank of has high ratio than bank of Sharjah, as it has a mean of 10.07 comparing with bank of Sharjah with a mean of 2.67. On average, Dubai Islamic bank's creditors provided 10.07 Dirhams in financing for every Dirham contributed by owners, comparing to 2.67 Dirhams for bank of Sharjah. On the other hand, Dubai Islamic bank of has managed to control this ratio better than its rival bank as the coefficient of variation indicated.

# 7. SHARE PERFORMANCE INDICATORS

## 7.1. Market Value

Tables 9 and 10 below show the developments of share prices over the years 2002-2006. The mean of the prices is AED 14.88 for bank of Sharjah, while it is AED 40.56 for Dubai Islamic bank which. This means that the public were more willing to invest in Dubai Islamic bank. Moreover, the stock prices of both banks were moving randomly over the years of study as reflected in high standard deviation and high coefficient of variation. The main reason behind this random walk of the prices is the shift of investments to other high profitability sectors based on new available information to the investors.

## 7.2. Price Earnings Ratio

This ratio relates the share price to the earnings per share. This ratio expresses the multiple that the market places on a firm's earnings per share. A high P/E multiple often reflects the market's perception of the firm's growth prospects. Thus, if investors believe that a firm's future earnings potential is good, they may be willing to pay a higher price for the stock and thus boost its P/E multiple. The mean measurement in Tables 9 and 10 is slightly different between the two banks. On average, investors are willing to buy a share of bank of Sharjah at price of 17 times more than its earnings per share, while the case of Dubai Islamic bank is 24 times. The

#### Table 5: Management capacity analysis: Bank of Sharjah

Indicators %	2002	2003	2004	2005	2006	Mean	Standard deviation	<b>Coefficient of variation</b>
Total expenses to operating income	40.78	33.00	25.60	11.60	11.31	24.46	13.03	53.27
Investment to total assets	3.10	2.32	2.65	12.11	18.12	7.66	7.13	93.08

#### Table 6: Management capacity analysis: Dubai Islamic Bank

Indicators %	2002	2003	2004	2005	2006	Mean	Standard deviation	<b>Coefficient of variation</b>
Total expenses to operating revenues	30.89	26.32	30.76	26.07	27.11	28.23	2.40	8.50
Investment to total assets	8.42	6.60	8.19	6.63	8.32	7.63	0.93	12.18

#### Table 7: Capital structure analysis: Bank of Sharjah

Details	2002	2003	2004	2005	2006	Mean	Standard deviation	<b>Coefficient of variation</b>
Total liabilities to total assets %	81.09	68.04	69.97	66.57	66.20	70.37	6.17	8.76
Total liabilities to equity (times)	4.29	2.13	2.33	1.99	2.64	2.67	0.93	34.83

#### Table 8: Capital structure analysis: Dubai Islamic Bank

Indicators %	2002	2003	2004	2005	2006	Mean	Standard deviation	<b>Coefficient of variation</b>
Total liabilities to total assets	91.97	92.54	90.24	91.07	86.75	90.51	2.28	2.52
Total liabilities to equity (times)	11.45	12.41	9.76	10.20	6.55	10.07	2.23	22.14

#### Table 9: Share performance analysis: Bank of Sharjah

1	v							
Indicators	2002	2003	2004	2005	2006	Mean	Standard deviation	<b>Coefficient of variation</b>
Market value	27	34	4.61	6.05	2.74	14.88	14.52	97.58
Price earnings ratio (times)	10.96	29.16	25.23	12.35	10.15	17.57	8.93	50.82
Market value to book value (times)	1.54	2.64	3.37	3.15	1.63	2.46	0.85	34.55
Earnings per share	2.46	1.17	0.18	0.49	0.27	0.91	0.95	104

#### Table 10: Share performance indicators: Dubai Islamic Bank

Indicators	2002	2003	2004	2005	2006	Mean	Standard deviation	<b>Coefficient of variation</b>
Market value	25.80	46.75	93.05	29.15	8.08	40.56	32.39	79.85
Price earnings ratio (times)	16.15	19.94	30.27	39.51	14.34	24.04	10.62	42.42
Market value to book value (times)	1.64	2.75	4.67	11.39	2.65	4.62	3.94	85.28
Earnings per share	1.60	2.34	3.07	0.74	0.56	1.66	1.06	63.85

standard deviation and the coefficient of variation show high dispersion and more instability of this ratio for both banks.

#### 7.3. Market Value to Book Value

This ratio structures the relation of share price to book value. This ratio is a blend of historical accounting and market indicators. It expresses the differential between the book value of the net assets of a firm and the market value of it. A high ratio means an increase in the stock price of the book value per share, and the company is doing well, since the market is willing to pay more than the equity per share. Tables 9 and 10 below, state that the mean of this ratio for the Dubai Islamic bank is 4.62, nearly doubled than the mean for bank of Sharjah. Moreover, the fluctuation around the mean and the coefficient of variation are also high for the same bank. This ratio is affected by both inside and outside finance and economic factors.

#### 7.4. Earnings per Share

This ratio measures the profitability of the shareholder's equity. The ratio provides a measure of overall performance and is an indicator of the possible amount of dividends that may be expected. The analysis in Tables 9 and 10, below shows that Dubai Islamic bank enjoys high profitability per share with a mean of 1.66 Dirhams comparing to bank of Sharjah with 0.91 Dirhams. The high ratio of earnings per share for Dubai Islamic bank is associated with high level of instability of this ratio as the coefficient of variation indicated.

#### 7.5. Bank Stability

This research focuses on measuring the financial performance of two banks using five types of parameters. However, it is possible to conduct a deeper investigation and measure the stability of the two banks by using the Z-Score measurement. Z-Score is

## Table 11: Z-score measurement

Year	Bank of Sharjah	Dubai Islamic Bank
2002	6.74	10.60
2003	10.87	10.24
2004	10.46	13.61
2005	13.50	13.85
2006	8.89	19.04
Z-score: 2002-2006	10.06	13.47

the inverse of the probability of insolvency. It actually indicates the number of standard deviation that a bank's ROA has to drop its expected value before equity is depleted and the bank is insolvent (Boyd et al., 1993). Thus a higher z-score indicates that a bank incurs fewer risks and is more stable. The z-score can be computed as follows:

$$Z - Score = \frac{ROA + CAR}{SDROA}$$

Where ROA is the ROA and Car is the ratio of total equity over total assets of the bank. SDROA is each bank's standard deviation of the ROA.

Z-score in Table 11 below indicates that both banks are stable, but the level of stability is by and large higher in Dubai Islamic bank than in bank of Sharjah for individual years and for the whole period 2002-2006.

## **8. CONCLUSION**

The central objective of the paper has been to conduct a comparative performance of two banks in United Arab Emirates for the period of 2002-2006. Five groups of parameters have been

used to measure liquidity level, profitability level, management capacity, capital structure and share performance. The findings show that both banks are financially viable as both have used the appropriate financial tools and policies to manage their organization and to adapt to their dynamic environment, resulting in a modest maximization of their profits. The liquidity level in Dubai Islamic bank is lower than that of its rival bank. The research findings also show that bank of Sharjah possesses high level of profitability but cautions that this is accompanied with a high level of instability as well. As far as management capacity ratios, the analysis declared that bank of Sharjah managed its operations with a lower level of expenditure than its rival bank. In addition, the analysis showed that bank of Sharjah has a stronger financial structure than its competitor. Finally, the analysis of the share performance and the z-scores showed that Dubai Islamic bank is in a stronger position than the bank of Sharjah in terms of overall stability.

## REFERENCES

- Abduh, M., Hasan, S., Pananjung, A. (2013), Efficiency and performance of Islamic Banks in Bangladesh. Journal of Islamic Banking and Finance, 30(2), 94-106.
- Abdul-hamid, M., Azmi, S. (2011), The performance of Banking during 2000-2009. International Journal of Economics and Management Sciences, 1(1), 9-19.
- Ahmed, A. (2010), Application of non-financial measures for assessment of performance of Islamic Banks in Pakistan. Interdisciplinary Journal of Contemporary Research in Business, 2(7), 173-181.
- Akhter, W., Raza, A., Akram, M. (2011), Efficiency and performance of Islamic Banking: The case of Pakistan. Far East Journal of Psychology and Business, 2(2), 54-71.
- Al Tamimi, H.H. (2010), Factors influencing performance of the UAE Islamic and conventional National Banks. Global Journal of Business Research, 4(2), 1-9.
- Boyd, J.H., Graham, S.L., Hewitt, R.S. (1993), Bank holding company mergers with Nonbank Financial firms. Journal of Banking and Finance, 17, 43-63.
- Cihak, M., Hesse, H. (2010), Islamic Banks and financial stability. Journal of Financial Services Research, 38(2-3), 95-113.
- Ferrouhi, E.M. (2014), Moroccan Banks analysis using camel model. International Journal of Economics and Financial Issues, 4(3), 622-627.
- Goddard, J., Molyneux, P., Wilson, J. (2004), The profitability of European

Banks. The Manchester Business Journal, 72(3), 363-381.

- Gupta, C.A.R. (2014), An Analysis of Indian Public Sector Banks Using Camel Approach, IOSR Journal of Business and Management, 16(1), 94-102.
- Husein, M.F. (2014), The Stability of Islamic Banks in Indonesia, Paper presented at The 2<sup>nd</sup> IBEA – International Conference on Business, Economics, and Accounting, Hong Kong, 26-28. March, 2014.
- Ibrahim, M. (2014), A comparative performance of two Banks in United Arab Emirates, Research Journal of Finance and Accounting, 5(21), 24-29.
- Ibrahim, M. (2015), Measuring the financial performance of Islamic Banks. Journal of Applied finance and Banking, 5(3), 93-104.
- Ibrahim, M.D., Mohammad, K., Hoque, N., Khan, M. (2014), Investigation the performance of Islamic Banks in Bangladesh. Asian Social Science, 10(22), 165-174.
- Jha, S., Hui, X. (2012), A comparison of financial performance of commercial Banks: A case study of Nepal. African Journal of Business Management, 6(25), 7601-7611.
- Kumbrai, M., Webb, R. (2010), A financial ratio analysis of commercial Bank performance in South Africa. African Review of Economics and Finance, 2(1), 30-53.
- Masruki, R., Ibrahim, N., Osman, E., Abdul-Wahab, H. (2011), Financial performance of Malaysian founder Islamic Banks versus conventional Banks. Journal of Business and Policy Research, 6(2), 67-79.
- Miniaoui, H., Gohou, G. (2011), Did the Islamic banking perform better during the financial crisis? Paper Presented at International Conference on Management, Economics, and Social Sciences, Bangkok. December, 2011.
- Misra, S.K., Apa, P.K. (2013), A camel model analysis of State Bank Group. World Journal of Social Science, 3(4), 36-55.
- Olson, D., Zoubi, R. (2008), Using accounting ratios to distinguish between Islamic and conventional Banks in the GCC region. The International Journal of Accounting, 43, 45-65.
- Sanwari, S., Zakaria, R. (2013), The performance of Islamic Banks and macroeconomic condition. ISRA International Journal of Islamic Finance, 5(2), 83-98.
- Tarawneh, M. (2006), A comparison of financial performance in the Banking sector: Some evidence from omani commercial Banks. International Research Journal of Finance and Economics, 3, 101-112.
- Tuna, V.V. (2013), Comparison analysis of camel ratio between bank Mandiri and Bank Negara Indonesia Period 2008 – 2012. EMBA Journal, 1(4), 756-761.
- Yudistira, D. (2004), Efficiency in Islamic banking. Islamic Economic Studies, 12(1), 1-19.