



Performance Analysis of Commercial Banks in the Kingdom of Bahrain (2001-2015)

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ABSTRACT

Banking sector plays a leading role in financing a country's economic activities. Its performance is crucial in determining a country's economic growth. This paper examines the performance of commercial retail banks (conventional and Islamic) in Bahrain and financial ratios were used for the period of 15 years 2001-2015 on parameters such as profitability, liquidity, operating efficiency, capital adequacy and leverage. The empirical results revealed that conventional retail banks, except for Bahrain development bank, have consistent performance in return on assets and return on equity while among the Islamic retail banks, the performance of Kuwait finance house is satisfactory in terms of profitability. The data also shows that all banks have satisfactory risk assets ratio. The commercial banks' profitability and capital adequacy as well as their profitability and efficiency are statistically correlated. There is a significant difference in the capital adequacy but no significant difference in profitability and liquidity was found among the listed commercial retail banks.

Keywords: Performance Analysis, Conventional Banks, Islamic Banks

JEL Classifications: G20, G21

1. INTRODUCTION

Bahrain is a small island-kingdom and home to many large and fastest growing financial institutions. For more than 40 years, it significantly played as the financial services' hub for the MENA region of which includes the six member states of the Gulf Cooperation Council (GCC). Bahrain's financial sector is currently the most significant economic sector accounting for more than 27% of the nation's gross domestic product and considered to be the leading employer in the country.

Ally (2013) and Sufian and Chong (2008) stated that an economy's banking sector plays a very critical role in sustaining financial intermediation, financial markets and has a substantial impact on the financial health of the entire economy. The Kingdom of Bahrain is undertaking various banking activities and commercial banks portray a very distinctive role and offer diverse blend of

local, regional and international range of financial services. As of February 2015, the combined total assets of Bahrain's banking sector amounted to US\$25.1 billion and commercial banks are the major contributors. Thus, commercial banks are regarded as crucial forces in capital formation, savings, investment and other economic resource allocation of various countries by making funds available for investors (Ongore and Kusa, 2013).

The present study used information from Bahrain Bourse website, commercial banks websites and available market news and information over the period 2001-2015. The performance measurement of the commercial banks includes an analysis of factors that have a direct impact on Bahrain's banking sector performance such as interest rates and financial ratios. This paper is intended to help commercial banks to improve their performance to remain competitive in the banking industry and also throws light on the comparative performance of conventional and Islamic banks.

2. LITERATURE REVIEW

Various statistical techniques are used in the evaluation of a bank's financial performance. Several recent studies have attempted to measure banking sector performance in Asia, Europe and Africa using the CAMEL test (for example Ishaq et al., 2016, Chytis et al., 2015; Kumar and Sayani, 2015; Gupta, 2014; Altan et al., 2014; Abd et al., 2014; Ifeacho and Ngalawa, 2014; Jha and Hui, 2012; Kouser et al., 2011; Nimalathasan, 2008).

Conventionally, the approach to bank performance analysis is based on financial ratio analysis which basically includes the measurement of profitability and liquidity (Ally, 2013; Ifeacho and Ngalawa, 2014; Kumbirai and Webb, 2010). According to Hajer and Anis (2016) several reasons covers the evaluation of a commercial bank's performance and over a given period, this evaluation is intended to determine the general efficacy and long-term feasibility of senior management decisions or governance as well as to minimize, if not solve, future financial failures. This is supported by other scholars from other countries such as Nisar (2015), Al Karim and Alam (2013), Alkhatib and Harasheh (2012) and Almazari (2011).

In the GCC region, Ibrahim (2015) and Al Tamimi (2010) investigated and compared the financial performance of Islamic and conventional banks in UAE and made use of accounting indicators such as profitability, liquidity and cost financial ratios as their main tools in measuring bank performance.

In Oman, Tarawneh (2006) examined the financial statements of five banks for the financial period 1999-2003 and simple regression was employed to estimate the impact of asset management, operation efficiency, and bank size on the financial performance of these banks. His findings indicated that operational efficiency, asset management, and bank size strongly influenced the financial performance of the banks.

Using data based on the annual financial statements of listed Kuwaiti banks and ratio analysis, Atyeh et al. (2015) measured the determinants of the performance of the Kuwaiti banking sector over the period of 2006-2012. The study revealed that the overall banking sector performance increased substantially in the first 2 years of the analysis but at the onset of the September 2008 global financial crisis, the trend resulted to a slump in profitability, return on equity (ROE), assets and capital.

In Bahrain examined the comparative performance of interest-free Islamic banks and the interest-based conventional commercial banks during the post-gulf war period of 1991-2001 using nine financial ratios. His study concluded that there is no significant difference in the performance between Islamic and conventional banks with respect to profitability and liquidity but a significant difference was found on credit performance. Iqbal and Joseph (2011a) selected a sample of 100 samples (50 each from conventional and interactive banks) and compared the performance of banks based on service quality. The results of the study reveal that among the factors affecting selection of the banks, people give top most priority to reliability, human element at the second

position, responsiveness at the third position, accessibility at the fourth position, and tangibility in the fifth position respectively. In a similar way Iqbal and Joseph (2011b) conducted gap analysis between conventional and interactive banks related to services provided by the banks. They concluded that the most important factor leading to service gap is systemization or technological advancement among interactive and conventional banks.

Using DuPont model to explain the variations in ROE (profitability) through profit margin, asset yield and leverage ratios during the period 2005-2009, Najjar (2013) found that five Bahraini banks showed that years 2005, 2006 and 2007, on the average, were satisfactory for the banks due to good profit margins generated in those years while in 2008 and 2009, poor profit margins had a significant impact on ROE.

Hawalдар et al. (2016a) evaluated the financial performance of retail and wholesale Islamic banks in Bahrain from 2009 to 2013 and found that operating efficiency of wholesale Islamic banks was better than retail Islamic banks for the period of 2009-2013 which was evident from asset utilization ratio. Using the result of correlation analysis of wholesale Islamic banks between various performance indicators, their study showed the existence of significant positive correlation of cost to income ratio with operational efficiency ratio and staff cost to income ratio. A similar study by Hawalдар et al. (2016b) on the evaluation of financial performance level of retail and wholesale conventional banks in Bahrain from 2009 to 2013 confirmed that the operating efficiency of wholesale banks was superior to the retail conventional banks. The empirical results suggested no significant difference between the performance of retail and wholesale conventional banks operating in Bahrain. Hawalдар et al. (2016c) analyses the impact of leadership and factors affecting leadership on the performance of banks in Bahrain. The results of the study revealed that team orientation and development is the crucial aspect in enhancing employees' performance. They study concluded that the leadership affect the performance of the banks in Bahrain.

Gharaibeh (2015) carried out a study that utilized balanced panel data sets of commercial banks retrieved mainly from the publications of Bahrain Bourse using 8 years of data for the period from 2006 to 2013. His findings revealed that capital adequacy ratio, the global financial crisis of 2008, capital strength, interest rate, debt ratio, and type of the bank were the key determinants of commercial banks profitability measured by ROE. The study showed that return on assets (ROA) is inferior to ROE which suggests that management would place more emphasis on ROE rather than ROA when assessing bank performance.

Using the CAMEL model approach, Suresh and Bardastani (2016) compared the performance level of retail Islamic and conventional banks of Bahrain from 2007 to 2014 and found that Islamic retail banks are less efficient and profitable compared to conventional retail banks and that the sample retail Islamic and conventional banks of Bahrain have adequate capital to carry out operations.

3. OBJECTIVES OF THE STUDY AND HYPOTHESES

The main objective of this research paper is to evaluate the financial performance of selected commercial banks listed in Bahrain Bourse based on various financial performance indicators over the period of 2001-2015.

This study is carried out with the following specific objectives

1. To analyse the profitability and operating performance of selected banks.
2. To study the capital adequacy and liquidity of selected banks.
3. To examine the relationship between profitability, efficiency and capital adequacy of commercial banks in the Kingdom of Bahrain.
4. To compare the performance of Islamic and conventional banks using various financial performance indicators.

The specific hypotheses of the study are the following

H₁ There is a significant correlation between the profitability and efficiency of commercial banks in the Kingdom of Bahrain.

H₂ There is a significant correlation between the profitability and capital adequacy of commercial banks in the Kingdom of Bahrain.

H₃ There is no significant difference between the profitability of Islamic and conventional banks.

H₄ There is no significant difference between the capital adequacy of Islamic and conventional banks.

H₅ There is no significant difference between the liquidity of Islamic and conventional banks.

4. DESCRIPTION OF RESEARCH METHODOLOGY

This explanatory study is based on secondary data obtained from published financial statements of accounts of commercial and Islamic banks operating in the Kingdom of Bahrain for 15 years. Panel data has been used for the study as it helps to evaluate the behaviour of variables of each bank over time and across space (Baltagi, 2005; Gujarati, 2003).

4.1. Sample Selection

All the seven commercial banks listed on Bahrain Bourse has been considered for the present study. Out these seven commercials banks, four banks are conventional commercial banks and three are Islamic commercial banks. The selected conventional retail banks are: Ahli United Bank (AUB), Bank of Bahrain and Kuwait (BBK), Bahrain Development Bank (BDB), National Bank of Bahrain (NBB). The Islamic banks selected for the study are: Al Baraka Islamic Bank (AIB), Bahrain Islamic Bank (BIB), Kuwait Finance House (KFH).

The following financial indicators have been measured and analysed for the banks under study

1. ROA
2. ROE

3. Operating efficiency
4. Net interest income to total assets
5. Net interest income to total income
6. Cost to income ratio
7. Loans to total assets
8. Loans to deposits
9. Customer deposits to total assets

5. EMPIRICAL RESULTS

The paper focused on the financial performance analysis of seven banks operating in Bahrain. The analysis is carried out on various parameters such as profitability, efficiency, liquidity and leverage.

5.1. Profitability

The profitability performance of banks is measured in terms of ROA, ROE, operating ratio, net interest income to total assets and net interest income to total income.

5.1.1. ROA

ROA shows how profitable the bank is in relation to its total assets. The higher returns indicate the most efficient utilization of assets by the banks. The results presented in the Table 1 and Figure 1 indicates that the NBB has high mean ROA of 2.02 and standard deviation of 0.18 followed by BBK and AUB. AIB has the least ROA which indicates less efficient utilization of assets. The standard deviation (variation) is very high in BIB which indicates the lack of consistency in ROA. It is observed that conventional retail banks, except BDB, have shown consistent operating performance.

5.1.2. ROE

ROE indicates the profitability of the bank in relation to its shareholders' wealth. Table 2 and Figure 2 reveals that in terms

Figure 1: Return on assets

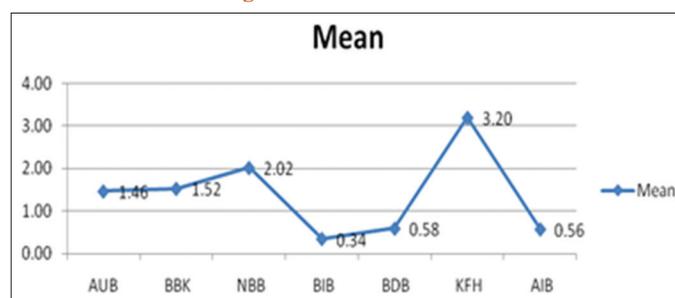


Figure 2: Return on equity

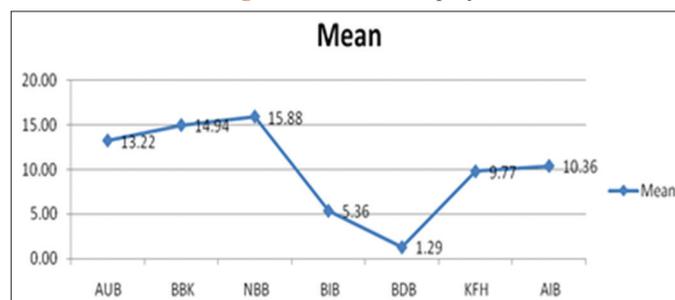


Table 1: Return on assets

Year	AUB (%)	BBK (%)	NBB (%)	BIB (%)	BDB (%)	KFH (%)	AIB (%)
2015	1.70	1.44	1.93	1.21	0.56	0.73	1.20
2014	1.60	1.49	1.95	1.00	0.42	0.34	1.30
2013	1.30	1.43	1.90	0.70	-0.22	0.38	1.30
2012	1.30	1.46	1.88	-4.33	-2.05	0.65	1.30
2011	1.19	1.20	1.96	-1.96	0.16	0.40	1.30
2010	1.20	1.63	1.96	-4.24	0.53	0.50	0.50
2009	0.96	1.66	2.06	-2.17	0.66	0.20	-2.70
2008	1.31	1.22	1.76	2.91	3.57	4.00	0.20
2007	1.70	1.51	2.32	4.57	1.54	6.00	0.40
2006	1.70	1.86	2.32	3.45	0.80	6.00	-0.40
2005	2.10	1.86	2.14	2.57	0.42	7.00	1.80
2004	1.60	1.83	2.18	1.50	0.53	8.00	NA
2003	1.50	1.83	1.91	1.10	-1.18	5.00	NA
2002	1.30	1.66	1.76	1.00	1.35	0.70	NA
2001	1.18	1.50	1.72	1.40	1.26	NA	NA
Mean	1.46	1.52	2.02	0.34	0.58	3.20	0.56
SD	0.33	0.22	0.18	3.08	1.33	3.47	1.26

Source: Annual reports of banks. AUB: Ahli United Bank, BBK: Bank of Bahrain and Kuwait, NBB: National Bank of Bahrain, BIB: Bahrain Islamic Bank, BDB: Bahrain Development Bank, KFH: Kuwait Finance House, AIB: Al Baraka Islamic Bank, SD: Standard deviation

Table 2: Return on equity

Year	AUB	BBK	NBB	BIB	BDB	KFH	AIB
2015	16.00	14.79	14.88	11.88	1.35	2.94	13.70
2014	15.20	13.93	14.42	11.80	0.96	1.40	13.60
2013	13.40	14.56	15.06	8.26	-0.49	1.53	13.10
2012	13.00	16.34	16.00	42.31	-4.71	2.56	12.50
2011	12.70	13.40	16.60	-17.00	0.39	2.00	11.70
2010	10.70	16.30	16.30	-40.00	1.21	2.00	2.80
2009	8.78	15.20	17.70	-14.00	1.30	1.00	15.50
2008	13.00	12.90	16.00	13.40	6.13	15.00	1.30
2007	14.50	12.60	17.10	13.40	3.28	26.00	2.20
2006	15.40	17.40	16.60	17.5	3.18	27.00	2.60
2005	12.70	16.90	14.00	11.4	1.55	26.00	15.00
2004	10.60	16.30	16.20	7.76	1.73	25.00	NA
2003	9.97	18.70	15.10	6.63	-3.08	8.80	NA
2002	7.57	17.40	14.10	5.83	2.14	0.70	NA
2001	8.58	14.70	13.80	7.44	2.92	NA	NA
Mean	13.22	14.94	15.88	5.36	1.29	9.77	10.36
SD	2.12	1.64	1.16	21.69	2.67	11.34	7.36

Source: Annual reports of banks. AUB: Ahli United Bank, BBK: Bank of Bahrain and Kuwait, NBB: National Bank of Bahrain, BIB: Bahrain Islamic Bank, BDB: Bahrain Development Bank, KFH: Kuwait Finance House, AIB: Al Baraka Islamic Bank, SD: Standard deviation

Table 3: Operating profit to total assets

Year	AUB	BBK	NBB	BIB	BDB	KFH	AIB
2015	0.02	0.04	0.03	0.05	0.01	0.08	0.03
2014	0.02	0.04	0.03	0.06	0.03	0.07	0.03
2013	0.02	0.03	0.03	0.05	0.01	0.03	0.03
2012	0.02	0.03	0.03	0.05	0.01	0.04	0.03
2011	0.02	0.03	0.03	0.05	0.01	0.05	0.03
2010	0.02	0.06	0.03	0.04	0.01	0.05	0.02
2009	0.02	0.04	0.03	0.05	0.02	0.04	0.03
2008	0.02	0.05	0.03	0.08	0.04	0.06	0.03
2007	0.01	0.03	0.02	0.08	0.03	0.08	0.03
2006	0.01	0.02	0.02	0.08	0.01	0.10	NA
2005	0.01	0.02	0.02	0.06	0.01	0.12	NA
2004	0.01	0.01	0.02	0.04	NA	NA	NA
2003	0.01	0.02	0.02	0.04	NA	0.07	NA
2002	0.01	0.01	0.02	NA	NA	0.02	NA
2001	0.02	0.01	0.02	NA	NA	NA	NA
Mean	0.02	0.03	0.03	0.05	0.02	0.06	0.03
SD	0.003	0.015	0.006	0.015	0.011	0.026	0.003

Source: Annual reports of banks. AUB: Ahli United Bank, BBK: Bank of Bahrain and Kuwait, NBB: National Bank of Bahrain, BIB: Bahrain Islamic Bank, BDB: Bahrain Development Bank, KFH: Kuwait Finance House, AIB: Al Baraka Islamic Bank, SD: Standard deviation

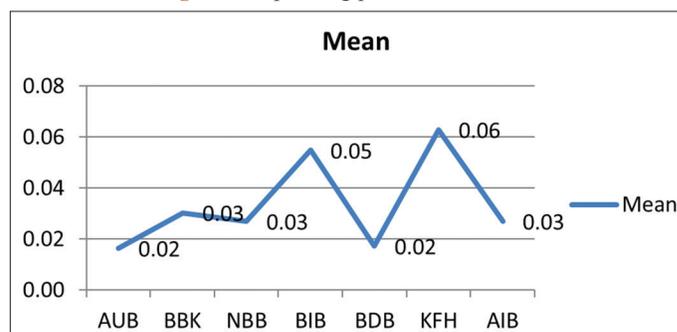
of return on shareholders' investment, NBB ranked the highest mean of ROE with 15.88 and standard deviation of 1.16 followed by BBK and AUB respectively. BDB has least the ROE which shows low profitability of the bank.

5.1.3. Operating profit ratio

Operating profit to total assets ratio measures the operating efficiency of a company. At the present context, interest is not only the sole source of operating income by banks. Results presented in Table 3 and Figure 3 shows that the operating profit to total asset ratio of KFH is the highest while AUB's ratio is the least among the other banks under study.

5.1.4. Net interest income to total assets

Net interest to total assets ratio helps us to understand the efficiency of banks' assets. For banking firms, loans and advances

Figure 3: Operating profit to total assets

are the assets that play vital role in the generation of interest which serves as their principal way to earn income. It is evident from Table 4 and Figure 4 that the net interest to total asset ratio of AIB is the highest as compared to other commercial

banks. On the other hand, AUB’s ratio ranked the lowest and it is also important to note that the variation in the ratio of AUB is significantly high.

5.1.5. Net interest income to total income

Table 5 and Figure 5 shows the ratio between net interest income and net profit. It is used to recognize the weight of net interest income with respect to total income. The ratio was extremely high in the case of AIB and AUB respectively. However, it was very poor in the case of BBK.

5.2. Efficiency

The operating efficiency of banks is measured in terms of their competency in managing their respective operating expenses and income.

5.2.1. Cost to income ratio

Cost to income ratio is one of the key measures of operating efficiency of a bank. It describes the relationship between the costs incurred and the income derived during a particular period. A lower ratio indicates an increased efficiency of bank and therefore, greater profitability for investors. This serves as a principal measure on the bank’s ability to convert its resources into revenue. Table 6 and Figure 6 indicates that KFH has the lowest mean cost to income ratio followed by AUB and NBB respectively which indicates that KFH has the highest operating efficiency. These results are consistent with the findings of Suresh and Bardastani (2016). AIB obtained the least operating efficiency.

5.3. Capital Adequacy

Capital adequacy ratio measures the stability of a bank in terms of its capital to risk-related capital. This is expressed through risk assets ratio and loan to total assets ratio.

Table 4: Net interest income to total assets

Year	AUB	BBK	NBB	BIB	BDB	KFH	AIB
2015	0.02	0.03	0.02	0.03	0.03	0.03	0.04
2014	0.02	0.02	0.02	0.03	0.03	0.03	0.04
2013	0.02	0.02	0.02	0.04	0.04	0.03	0.05
2012	0.02	0.02	0.02	0.04	0.03	0.03	0.06
2011	0.02	0.02	0.02	0.04	0.04	0.03	0.06
2010	0.02	0.03	0.02	0.04	0.04	0.03	0.04
2009	0.02	0.03	0.02	0.04	0.04	0.04	0.06
2008	0.02	0.03	0.02	0.04	0.04	0.03	0.06
2007	0.01	0.02	0.02	0.05	0.03	0.04	0.06
2006	0.01	0.02	0.02	0.06	0.03	0.04	NA
2005	0.01	0.02	0.02	0.04	NA	0.04	NA
2004	0.02	0.02	0.02	NA	NA	NA	NA
2003	0.02	0.02	0.02	NA	NA	0.08	NA
2002	0.02	0.02	0.02	NA	NA	0.02	NA
2001	0.02	0.02	0.02	NA	NA	NA	NA
Mean	0.02	0.02	0.02	0.04	0.03	0.03	0.05
SD	0.003	0.004	0.001	0.007	0.004	0.014	0.008

Source: Annual reports of banks. AUB: Ahli United Bank, BBK: Bank of Bahrain and Kuwait, NBB: National Bank of Bahrain, BIB: Bahrain Islamic Bank, BDB: Bahrain Development Bank, KFH: Kuwait Finance House, AIB: Al Baraka Islamic Bank, SD: Standard deviation

Table 5: Net interest income to total income

Year	AUB	BBK	NBB	BIB	BDB	KFH	AIB
2015	1.52	0.00	0.63	0.77	0.58	0.37	1.38
2014	1.58	0.00	0.67	0.56	0.54	0.62	1.34
2013	1.23	0.00	0.71	1.01	0.74	1.33	1.80
2012	1.90	0.00	0.71	1.25	0.75	1.20	2.08
2011	1.83	0.00	0.69	1.25	0.80	0.89	2.18
2010	1.92	0.00	0.68	1.90	0.77	0.99	1.33
2009	2.32	0.00	0.68	1.49	0.74	0.79	2.25
2008	1.58	0.00	0.74	0.66	0.51	0.40	2.25
2007	1.11	0.00	0.65	0.85	0.51	0.37	2.05
2006	1.34	0.00	0.67	1.15	0.49	0.38	NA
2005	1.06	0.00	0.69	0.98	NA	0.27	NA
2004	1.17	1.15	0.99	NA	NA	NA	NA
2003	1.29	1.12	1.04	NA	NA	2.27	NA
2002	1.61	1.28	1.22	NA	NA	2.66	NA
2001	1.78	1.42	1.35	NA	NA	NA	NA
Mean	1.55	0.33	0.81	1.08	0.64	0.96	1.85
SD	0.34	0.55	0.22	0.37	0.12	0.72	0.38

Source: Annual reports of banks. AUB: Ahli United Bank, BBK: Bank of Bahrain and Kuwait, NBB: National Bank of Bahrain, BIB: Bahrain Islamic Bank, BDB: Bahrain Development Bank, KFH: Kuwait Finance House, AIB: Al Baraka Islamic Bank, SD: Standard deviation

Figure 4: Net interest income to total assets

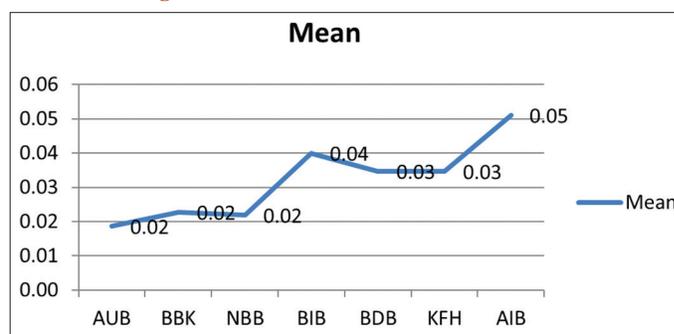


Figure 5: Net interest income to total income

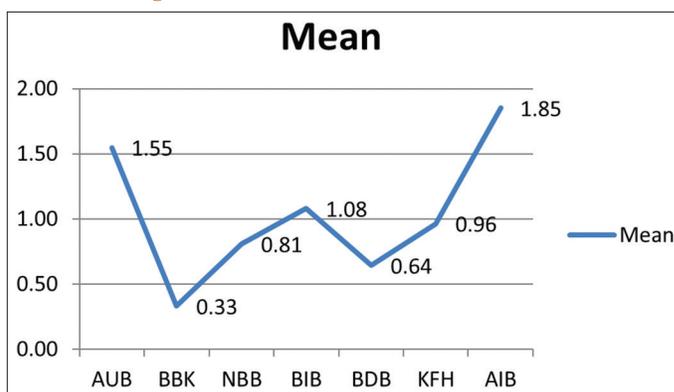
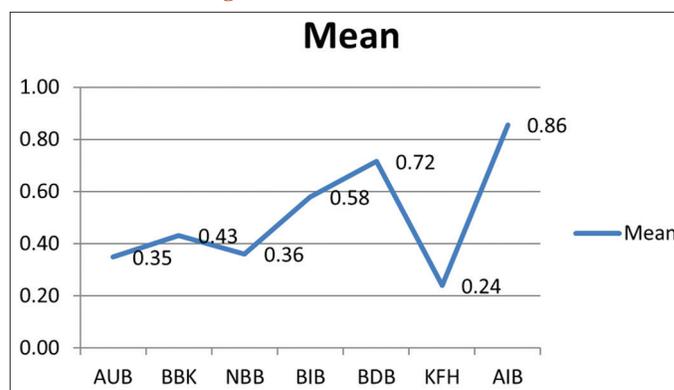


Figure 6: Cost to income ratio



5.3.1. Loans to total assets ratio

Loan to assets is a leverage ratio that defines the percentage of total assets financed by liabilities or debts. There is more financial risk associated with higher ratio and as a result, it may be difficult for high leverage firm to have financial flexibility. The results presented in Table 7 and Figure 7 indicate that the BDB carried the highest loan to assets ratio followed by BBK and AUB respectively. These results indicate that these banks have more leverage and greater risk during recession.

5.4. Liquidity

The liquidity of the selected banks is measured through customer deposits to total assets ratio.

Table 6: Cost to income ratio

Year	AUB	BBK	NBB	BIB	BDB	KFH	AIB
2015	0.28	0.41	0.32	0.52	0.86	0.16	0.89
2014	0.29	0.39	0.33	0.55	0.64	0.26	0.93
2013	0.30	0.48	0.32	0.53	0.81	0.42	0.91
2012	0.32	0.47	0.32	0.80	0.84	0.34	0.98
2011	0.32	0.45	0.33	0.75	0.79	0.29	0.91
2010	0.34	0.42	0.36	1.08	0.77	0.28	0.75
2009	0.32	0.46	0.36	0.71	0.65	0.31	1.04
2008	NA	0.31	0.38	0.31	0.46	0.15	0.80
2007	0.35	0.35	0.36	0.32	0.48	0.15	0.76
2006	0.40	0.41	0.36	0.39	0.70	0.17	0.94
2005	0.37	0.43	0.38	0.41	0.78	0.19	0.51
2004	0.41	0.44	0.36	0.58	0.80	0.16	NA
2003	0.39	0.46	0.39	NA	NA	NA	NA
2002	0.44	0.48	0.43	NA	NA	NA	NA
2001	NA	0.51	0.42	NA	NA	NA	NA
Mean	0.35	0.43	0.36	0.58	0.72	0.24	0.86
SD	0.05	0.05	0.03	0.21	0.13	0.08	0.14

Source: Annual reports of banks. AUB: Ahli United Bank, BBK: Bank of Bahrain and Kuwait, NBB: National Bank of Bahrain, BIB: Bahrain Islamic Bank, BDB: Bahrain Development Bank, KFH: Kuwait Finance House, AIB: Al Baraka Islamic Bank, SD: Standard deviation

Table 7: Loans to total assets

Year	AUB	BBK	NBB	BIB	BDB	KFH	AIB
2015	0.57	0.48	0.35	0.61	0.63	0.37	0.48
2014	0.55	0.53	0.29	0.58	0.64	0.38	0.44
2013	0.53	0.50	0.31	0.48	0.60	0.38	0.41
2012	0.53	0.48	0.33	0.50	0.71	0.37	0.46
2011	0.55	0.51	0.41	0.47	0.71	0.39	0.44
2010	0.55	0.52	0.39	0.45	0.63	0.44	0.27
2009	0.56	0.56	0.46	0.50	0.49	0.48	0.31
2008	0.58	0.62	0.47	0.48	0.46	0.45	0.37
2007	0.52	0.54	0.50	0.37	0.59	0.38	0.31
2006	0.43	0.55	0.47	0.21	0.58	0.40	0.42
2005	0.43	0.53	0.47	0.23	0.51	0.42	0.49
2004	0.36	0.54	0.50	NA	NA	0.25	NA
2003	0.40	0.50	0.46	NA	NA	NA	NA
2002	0.42	0.44	0.42	NA	NA	NA	NA
2001	0.46	0.44	0.42	NA	NA	NA	NA
Mean	0.50	0.52	0.41	0.44	0.60	0.39	0.40
SD	0.07	0.05	0.07	0.12	0.08	0.05	0.07

Source: Annual reports of banks. AUB: Ahli United Bank, BBK: Bank of Bahrain and Kuwait, NBB: National Bank of Bahrain, BIB: Bahrain Islamic Bank, BDB: Bahrain Development Bank, KFH: Kuwait Finance House, AIB: Al Baraka Islamic Bank, SD: Standard deviation

5.4.1. Customer deposits to total assets

Table 8 and Figure 8 shows the customer deposit to total assets ratio of selected banks in Bahrain and reveal their respective liquidity position. NBB and AIB have the highest customer deposit to total assets ratio which implies that they have more liquid assets while BDB has the least ratio.

5.4.2. Loans to deposits ratio

Loans to deposits ratio assess the liquidity level of banks. A very high loan to deposits ratio suggests that the bank's liquidity is not enough to cover unforeseen financial requirements whereas a very low ratio means lesser profitability from the bank. It can be observed from Table 9 and Figure 9 that BIB ranked the highest mean of loan to deposit ratio followed by AUB and BBK respectively which means that the liquidity level of these banks are low but their profitability or earnings is high. On the other hand, BDB has the lowest loans to deposits ratio which suggests that it's not earning as much it could be.

5.5. Testing of Hypotheses

Hypotheses on the profitability, capital adequacy and liquidity of Islamic and conventional banks were tested using ANOVA.

Figure 7: Loans to total assets ratio

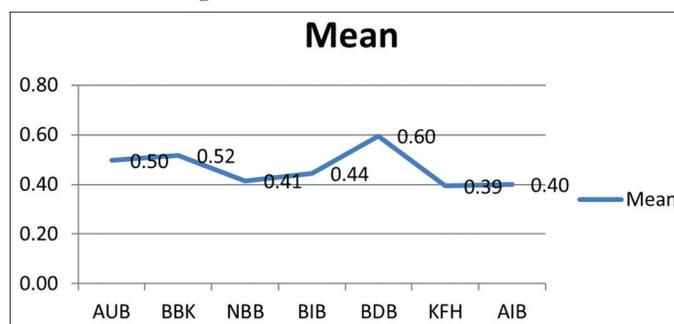


Figure 8: Customer deposits to total assets

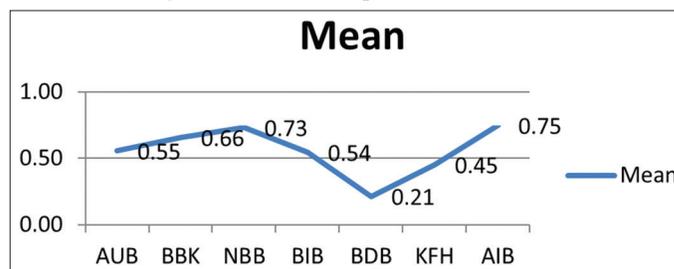
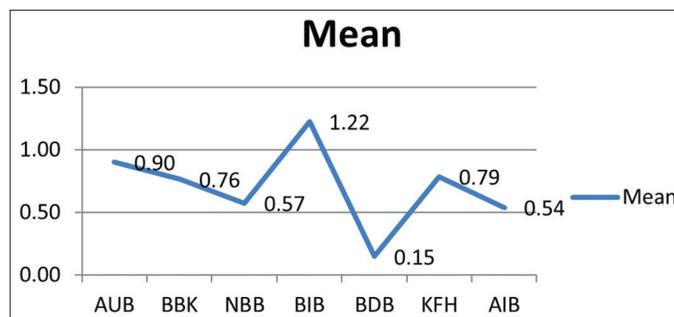


Figure 9: Loans to deposits ratio



H₁ There is a significant correlation between the profitability and efficiency of commercial banks in the Kingdom of Bahrain.

H₂ There is a significant correlation between the profitability and capital adequacy of commercial banks in the Kingdom of Bahrain.

Correlation technique is used to examine the relationship between profitability and efficiency as well as profitability and capital adequacy. Adam (2014) also used correlation to analyse the relationship among financial performance variables. It can be observed that there is a negative correlation between profitability and efficiency. Results presented in Table 10 indicates that the correlation values between ROA and cost to income (-0.829) and ROE and cost to income (-0.544). However, only high correlation between ROA and cost to income is significant since it has a P value of 0.021. This signifies that an increase in efficiency (decrease in

cost to income) leads to an increase in profitability. We conclude that there is a significant correlation between profitability and efficiency of commercial banks in the Kingdom of Bahrain.

The correlation between ROA and capital adequacy is -0.134 while ROE and capital adequacy shows a correlation of -0.621. These values are not significant since the p values are greater than 0.05. It can be observed that there is negative correlation between profitability and capital adequacy and it is not significant. Similar findings were observed in the study of Mistry and Savani (2015).

The hypothesis is rejected as there is a significant correlation between profitability and capital adequacy as well as profitability and efficiency of commercial banks in Bahrain.

H₃ There is no significant difference in the profitability between Islamic and conventional banks.

Table 8: Customer deposits to total assets

Year	AUB	BBK	NBB	BIB	BDB	KFH	AIB
2015	0.69	0.72	0.75	0.78	0.25	0.47	0.80
2014	0.69	0.71	0.79	0.65	0.22	0.58	0.77
2013	0.67	0.73	0.76	0.68	0.26	0.53	0.79
2012	0.61	0.71	0.78	0.69	0.29	0.50	0.82
2011	0.61	0.75	0.80	0.63	0.34	0.53	0.94
2010	0.56	0.65	0.78	0.64	0.33	0.48	0.86
2009	0.56	0.67	0.70	0.57	0.27	0.54	0.42
2008	0.56	0.62	0.75	0.49	0.21	0.46	0.46
2007	0.47	0.54	0.69	0.36	0.15	0.57	0.59
2006	0.43	0.57	0.72	0.35	0.01	0.47	0.96
2005	0.48	0.61	0.68	0.15	0.02	0.50	0.80
2004	0.49	0.63	0.70	NA	NA	0.30	NA
2003	0.45	0.63	0.72	NA	NA	0.33	NA
2002	0.46	0.63	0.69	NA	NA	0.06	NA
2001	0.58	0.68	0.65	NA	NA	NA	NA
Mean	0.55	0.66	0.73	0.54	0.21	0.45	0.75
SD	0.09	0.06	0.04	0.18	0.11	0.13	0.17

Source: Annual reports of banks. AUB: Ahli United Bank, BBK: Bank of Bahrain and Kuwait, NBB: National Bank of Bahrain, BIB: Bahrain Islamic Bank, BDB: Bahrain Development Bank, KFH: Kuwait Finance House, AIB: Al Baraka Islamic Bank, SD: Standard deviation

Table 9: Loans to deposits ratio

Year	AUB	BBK	NBB	BIB	BDB	KFH	AIB
2015	82.37	66.78	46.81	78.46	2.87	77.76	59.80
2014	80.26	74.71	36.24	72.48	2.52	65.15	56.78
2013	78.56	68.81	41.25	70.80	2.12	72.29	51.34
2012	85.10	67.98	42.75	72.32	2.10	74.56	55.84
2011	89.34	67.77	51.01	114.40	2.19	74.19	47.16
2010	97.59	80.05	50.23	115.46	2.35	91.82	31.71
2009	100.44	83.65	65.66	123.01	2.40	89.66	74.19
2008	103.45	101.12	62.58	144.62	3.10	98.13	80.57
2007	111.63	100.89	71.67	171.72	66.11	61.33	53.37
2006	98.16	92.14	65.37	224.08	27.25	81.13	43.60
2005	89.84	86.70	68.74	159.57	48.08	77.80	39.05
2004	72.38	85.96	70.39	NA	NA	NA	NA
2003	89.48	59.32	62.89	NA	NA	NA	NA
2002	92.31	54.52	60.67	NA	NA	NA	NA
2001	79.57	55.10	64.20	NA	NA	NA	NA
Mean	92.43	80.96	54.76	122.45	14.64	78.53	53.95
SD	10.61	13.04	12.42	49.35	22.62	11.14	14.29

Source: Annual reports of banks. AUB: Ahli United Bank, BBK: Bank of Bahrain and Kuwait, NBB: National Bank of Bahrain, BIB: Bahrain Islamic Bank, BDB: Bahrain Development Bank, KFH: Kuwait Finance House, AIB: Al Baraka Islamic Bank, SD: Standard deviation

On the basis of the profitability ratios presented in Table 11 and the ANOVA results presented in Table 12 indicates that P value is 0.390 which is more than 0.05. Hence, null hypothesis is accepted and there is no significant difference between the profitability of conventional and Islamic banks. These results are consistent with the findings of Samad (2004).

Table 10: Correlation analysis

Particulars	ROA	ROE	Cost to income	Capital adequacy
ROA				
Pearson correlation	1	0.493	-0.829*	-0.134
Sig. (2-tailed)		0.261	0.021	0.774
N	7	7	7	7
ROE				
Pearson correlation	0.493	1	-0.544	-0.621
Sig. (2-tailed)	0.261		0.207	0.137
N	7	7	7	7
Cost to income				
Pearson correlation	-0.829*	-0.544	1	0.204
Sig. (2-tailed)	0.021	0.207		0.661
N	7	7	7	7
Capital adequacy				
Pearson correlation	-0.134	-0.621	0.204	1
Sig. (2-tailed)	0.774	0.137	0.661	
N	7	7	7	7

*Correlation is significant at the 0.05 level (2-tailed). ROA: Return on assets, ROE: Return on equity

Table 11: Profitability ratios

Ratio	Conventional banks	Islamic banks
Return on assets	1.4	1.37
Return on equity	12.35	7.12
Operating profit to total assets	2.5	5.02
Net interest income to total assets	2.48	4.12
Net interest income to total income	72.65	120.75

Table 12: ANOVA of profitability

Type of bank	Mean	P value	Hypothesis
Islamic	18.2760	0.390	Accepted
Conventional	27.6760		

H₄ There is no significant difference between the capital adequacy of Islamic and conventional banks.

The ratios presented in the Table 13 and the ANOVA results in Table 14 indicates that P value is 0.047 which is less than 0.05. Thus, null hypothesis is rejected and there is a significant difference between the capital adequacy of Islamic and conventional banks. The results are consistent with the findings of Suresh and Bardastani (2016).

H₅ There is no significant difference between the liquidity of Islamic and conventional banks.

The liquidity ratio presented in Table 15 and the ANOVA results in Table 16 indicates that the P value is 0.362 which is more than 0.05. Hence, null hypothesis is accepted and there is no significant difference between the liquidity of Islamic banks and conventional banks. These results are consistent with the findings of Samad (2004).

6. CONCLUSIONS AND RECOMMENDATIONS

Banks play an important role in the allocation of economic resources to countries. They act as a channel for the movement of funds from depositors to investors. However, for effective functioning, they need to generate enough income to cover their operational costs. This means that for sustainable intermediation function, banks need to be profitable. Moreover, the financial performance of banks has critical implications on the economic growth of countries.

This study examined the financial performance of commercial banks operating in Kingdom of Bahrain using various financial ratios and focused as well on the difference of the financial performance of conventional and Islamic banks. In terms of

Table 13: Capital adequacy ratio

Ratio	Conventional banks	Islamic banks
Loans to total assets	51.41	41.66

Table 14: ANOVA of capital adequacy

Type of bank	Mean	P value	Hypothesis
Islamic	39.115	0.047	Rejected
Conventional	30.170		

Table 15: Liquidity ratio

Ratio	Conventional banks	Islamic banks
Customer deposit to total deposit	54.71	60.07
Loan to deposits	60.70	84.98

Table 16: ANOVA of liquidity

Type of bank	Mean	P value	Hypothesis
Islamic	57.705	0.362	Accepted
Conventional	72.525		

ROA and ROE, which are widely used measure of profitability, conventional retail banks, except BDB, have shown consistent performance. NBB showed better performance in ROA and ROE as compared to other selected banks. The same results were revealed by Najjar (2013). Among the Islamic banks, the performance of KFH is considered satisfactory in terms of profitability. The data also shows that all banks have satisfactory risk assets ratio. The test results revealed that there is correlation between profitability and capital adequacy as well as profitability and efficiency of commercial banks in Kingdom of Bahrain. Furthermore, it is revealed that there is no significant difference in the profitability as well as the liquidity of conventional and Islamic banks. These research findings were similar to Samad (2004). With regard to capital adequacy, there is a significant difference between the Islamic and conventional banks and these results were supported by the study of Suresh and Bardastani (2016).

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