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FINANCIAL PERFORMANCE OF ISLAMIC AND CONVENTIONAL BANKS IN SAUDI ARABIA: A COMPARATIVE STUDY

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ABSTRACT

In the current world today, there are two types of banking system exist (Islamic and conventional banking). Each of this system has its pro and cons due to its different financial investments. The aim of this study is to investigate the financial performance of Islamic and conventional banks in Saudi Arabia using measures of profitability, liquidity, risk and solvency, and efficiency. A total of 6 banks (three conventional and three Islamic) were considered over the period of 2010-2015. T-test is used to determine the significance of the difference between the two groups. The study found that Islamic banks are less profitable, more liquid, less risky, and more efficient during 2010-2015.

INTRODUCTION

It is well known that all banks are playing an important role in the growth of the economy even though each bank system has its own structure and characteristics. In 1970, Islamic banks have begun to spread rapidly because of Muslims' need for usury-free financial transactions. Also, because of the different modes of operations, Islamic banks have compared to conventional banks, which contributed to the spread in Western countries as well [1].

Focusing on the performance of Islamic banks comparing to conventional banks, a large number of experimental studies have been conducted, and most of these studies compare the risks and profitability of both banks systems. Several studies have been conducted on these two types banking system. Ansari & Rehman (2011) conducted a comparative study to examine the performance of Islamic and Conventional banks in Pakistan. The study

showed that Islamic banks in Pakistan have better performance than their conventional banks. To analyse the performance of the banks they used the profitability measures of Return on average assets (ROAA), Return on average equity (ROAE), and Profit Expense Margin (PEM). Furthermore, they used liquidity ratio to measure the ability of the bank to meet its financial obligations. The liquidity is measured by using Current Ratio (CR), Current Asset Ratio (CAR), Loan Deposit Ratio (LDR), and Net Loan/ Total Asset Ratio (NLTA). To evaluate the risk, they calculated the ratios using Debt Equity Ratio (DER), Debt to total asset ratio (DTAR), and Loan Deposit Ratio (LDR). Moreover, Ansari & Rehman indicated the healthiness of the banks against the losses by using the capital ratios. Overall, the study concluded that conventional banks are more risky, less liquid, and operationally inefficient than Islamic banks [2]. On the other hand, Safiullah (2010) evaluated the superiority of financial performance of conventional banks and interest-free banks of Bangladesh in term of business profitability, liquidity and solvency, efficiency and other measures. To analyse the financial performance, Safiullah used profitability measures of Return on asset (ROA), Profit expense ratio (PER), Profit growth, Return on equity (ROE) and EPS. Moreover, corporate debt restructuring (CDR) and capital adequacy ratio (CAR) used to analyse the liquidity of the banks. The study results concluded that conventional banks perform better than Islamic banks based on productivity and efficiency [3]. However, Islamic banks were superior in business development, profitability, and liquidity. In a study piloted by Zeitun (2012), the author conducted a study to determine the performance of Islamic and conventional banks in GCC countries during 2002-2009. The study contained a sample of 38 conventional banks and 13 Islamic banks. The variables have been used in this research are ownership structure variable, internal variables (Bank specific factors), and external variables (macroeconomic factors). The results showed that equity is essential in raising the profitability of interest-based banks only. The cost-to income ratio has a negative effect on Islamic and conventional banks performance. The predestined effect of the bank's size supported the economies of scale in interest-free banks using the ROE. Moreover, the study indicated that the GDP have a positive correlation with banks profitability but inflation has a negative correlation [4]. Srairi (2010) investigated the profit efficiency and cost using a sample of 71 commercial banks during 1999-2007 through stochastic frontier approach by comparing the efficiency between interest free and interest-based banks across the world and GCC countries. The findings revealed that GCC banks are more efficient than the world. This concluded that Islamic banks are less efficient than conventional banks [5]. Abedifar, Molyneux and Tarazi (2013) used a sample of 553 banks from 1999-2009 to evaluate the risk and stability features of Islamic banks. They found that Islamic banks have lower credit risk than traditional banks. Moreover, Islamic banks are more stable in the term of insolvency risk [6].

Based on the studies that have been done, it is seen that both conventional banks and Islamic banks have mixed reviews. Therefore, this study intends to educate banks' customers about the financial performance of both Islamic and conventional banks by focusing on the differences between Islamic and conventional banks and their financial performance in terms of profitability, liquidity, risk and solvency, and efficiency for the banks in Saudi Arabia.

METHODOLOGY

This study is considered a quantitative comparative research as it aims to determine if there are significant differences between Islamic banking and conventional banking in term of profitability, liquidity, risk and solvency, and efficiency. The sample size is comprised of 3 Islamic banks and 3 conventional banks in Saudi Arabia. Table 1 contains the Islamic and conventional banks that are taken under consideration to conduct this study. To obtain reliable results, the financial statements of Islamic banks and conventional banks during the period of 2010 to 2015 were used.

Table 1. List of Banks Studied

Islamic Banks	Conventional Banks
Albilad Bank	Saudi British Bank - SABB
Alrajhi Bank	Saudi Investment Bank
AlJazira Bank	National Commercial Bank - NCB Capital

The data of this study is gathered from the annual reports of the all the banks that are used in the study including balance sheets and income states, Bloomberg and Tadawul. The financial ratios that used in this study are quite the same as the previous study done by Moin (2013). Interbank comparison analysis is used to compare the performance of Islamic and conventional banks. To determine the significance of the performance of both banks, t-test is used in this study [7]. The performance measure was based on

1. Profitability Ratios
- Return on Assets (ROA)
- Return on Equity (ROE)
- Profit to Expenses Ratio (PER)
2. Liquidity Ratios
- Loan to Deposit Ratio (LDR)
- Cash & Portfolio Investment to Deposit Ratio (CPIDR)
- Loan to Asset Ratio (LAR)
3. Risk and Solvency Ratios
- Debt-Equity Ratio (DER)
- Debt to Total Asset Ratio (DTAR)
- Equity Multiplier (EM)
4. Efficiency Ratios
- Asset Utilization (AU)
- Income to Operating Expenses Ratio (IER)
- Operating Efficiency (OE)

RESULTS AND DISCUSSION

PROFITABILITY RATIOS

Return on Assets (ROA)

Both Islamic and conventional banks showed somewhat similar ROA ratios as depicted in Table 2. However, ROA of Islamic banks was higher than the ROA of conventional banks except for the year of 2015, wherein Islamic and conventional banks had the same exact ROA. Both banks showed constant increasing from 2010 until 2012 but they started decreasing slightly in 2013 and 2014, where Islamic banks' ROA decreased by 7% in 2013, then decreased by 2.6%. On the other hand, conventional banks showed a slight decrease by 6% in 2013 while in 2014 the ROA decreased by 2% only. Finally, the results showed that the average of Islamic banks' ROA is somewhat higher than ROA of conventional banks. Moreover, T-test showed that the difference of the two means is significant at 5% level of significance (See Table 14).

Table 2. ROA Of Islamic And Conventional Banks For 2010 Till 2015

ROA	Islamic Banks	Conventional Banks
2010	1.96	1.87
2011	2.05	1.98
2012	2.08	2.00
2013	1.93	1.88
2014	1.88	1.84
2015	1.97	1.97
Mean	1.98	1.92
Standard deviation	0.07785	0.06579

Return on Equity (ROE)

Based on the results of ROE in Table 3, there was a slight fluctuation in both Islamic and conventional banks; Islamic bank's ROE was 14.52 then it increased until 2012, after that it decreased by 5% then kept decreasing and increasing by small percentages. ROE of conventional banks showed constant increasing until year 2013 where it decreased by 11%. Overall, the average of ROE of both Islamic and conventional banks showed that Islamic banks have higher ROE than conventional banks. However, statistically there is no significant difference between the two banks at 5% level of significance (See Table 14).

Table 3. ROE Of Islamic And Conventional Banks For 2010 Till 2015

ROE	Islamic Banks	Conventional Banks
2010	14.52	15.1
2011	15.66	15.8
2012	16.23	16.0
2013	15.29	14.4

2014	15.04	13.5
2015	15.95	14.1
Mean	15.45	14.83
Standard deviation	0.62695	0.97118

Profit Expense Ratio (PER)

The results of PER are tabulated as in Table 4. PER of Islamic banks showed constant increasing during the time horizon of the study, but overall conventional banks have higher PER than Islamic banks, even though Islamic banks' PER is higher in 2010. Conventional banks' PER was increasing until it decreased by 45% in 2014, then, it increased by 62%. Islamic banks PER showed a slight increasing in 2014 by 10%, while it increased by 5% only in 2015. Moreover, the means of both banks indicate that conventional banks have higher PER. Finally, the T-test showed that there is no significant difference between the two means at 5% level of significance (See Table 14).

Table 3. PER Of Islamic And Conventional Banks For 2010 Till 2015

PER	Islamic Banks	Conventional Banks
2010	0.825	0.551
2011	0.890	1.048
2012	0.939	1.167
2013	0.968	1.457
2014	1.072	0.794
2015	1.129	1.292
Mean	0.97	1.05
Standard deviation	0.11316	0.33238

LIQUIDITY RATIOS

Loan to Deposit Ratio (LDR)

Islamic banks' LDR was slightly higher than conventional banks. With reference to Table 5, both banks showed an unnoticeable increase from 2010 to 2015; Islamic banks LDR was 80% for two years then it increased by 1% only to be 81% for two years also. In 2014, it increased by 1% then it increased in 2015 to be 84%. For conventional banks, LDR showed slight increasing by only 1% from year to year. Overall, these ratios indicate fewer liquid conditions of Islamic and conventional banks. The results indicate that the average of conventional banks LDR was lower than Islamic banks by a small difference. Although, statistically there is significant difference between the two means is at 5% level of significance (See Table 14).

Table 5. LDR Of Islamic And Conventional Banks For 2010 Till 2015

LDR	Islamic Banks	Conventional Banks
2010	0.795	0.771
2011	0.797	0.774

2012	0.809	0.783
2013	0.813	0.787
2014	0.820	0.786
2015	0.844	0.792
Mean	0.81	0.78
Standard deviation	0.01763	0.00825

Cash Deposit Ratio (CDR)

Table 6 presented the data on CDR values for both banks. CDR of conventional banks showed increasing from 2012 to 2015, where it increased by 38% in 2013 and by 33% in 2014. Islamic banks CDR showed stable ratios until it became lower in 2014. In 2015, CDR of both banks was slightly the same as difference was 1% only. Moreover, Islamic banks had higher CDR, indicating more liquidity than conventional banks. The average CDR of Islamic banks were higher than conventional banks. Statistically, there is significant difference between the two means at 5% level of significance (See Table 14).

Table 6. CDR Of Islamic And Conventional Banks For 2010 Till 2015

CDR	Islamic Banks	Conventional Banks
2010	0.032	0.012
2011	0.032	0.013
2012	0.031	0.013
2013	0.031	0.018
2014	0.029	0.024
2015	0.030	0.029
Mean	0.030	0.020
Standard deviation	0.00131	0.00695

Loan to Asset Ratio (LAR)

Table 7 showed that Islamic banks LAR was on increasing trend during 2010-2015 due to the excessive loans. It also showed the increasing of conventional banks LAR but less than Islamic banks. The average LAR of Islamic banks were slightly higher than conventional banks. T-test indicated that there is high significant difference between the two means at 5% level of significance (See Table 14).

Table 7. LAR Of Islamic And Conventional Banks For 2010 Till 2015

LAR	Islamic Banks	Conventional Banks
2010	0.643	0.582
2011	0.646	0.584
2012	0.656	0.592
2013	0.661	0.606
2014	0.667	0.614
2015	0.680	0.627
Mean	0.660	0.60

Standard deviation	0.01385	0.01771

RISK AND SOLVENCY RATIOS

Debt to Equity Ratio (DER)

With reference to Table 8, in 2010 DER of Islamic and conventional banks was somewhat the same. After that, Islamic banks DER started to increase until 2014 where it increased by 34% in 2014, then, it dropped by 77% in 2015. High ratios indicated that the banks were facing risk due to the financing by the creditors instead of the banks' own financial sources. For conventional banks, ratios were constant until 2012, and then they started to decrease. Moreover, Islamic banks DER was higher than Conventional banks. However, statistically, the difference between the two means is not significant at 5% level of significance (See Table 14).

Table 8. DER Of Islamic And Conventional Banks For 2010 Till 2015

DER	Islamic Banks	Conventional Banks
2010	0.679	0.654
2011	0.790	0.666
2012	0.920	0.697
2013	1.110	0.589
2014	1.491	0.440
2015	0.333	0.388
Mean	0.887	0.573
Standard deviation	0.39358	0.12863

Debt to Total Assets Ratio (DTAR)

From Table 9, it is found that the DTAR of conventional banks was slightly higher than Islamic banks but started decreasing over the years. It is also revealed that DTAR of conventional banks decreased by 36% in 2014 and by 18% in 2015, wherein Islamic banks' DTAR increased by 33% then decreased by 71% in 2015. High DTAR indicates more leverage of the bank caused by financing banks' assets through debt. The results showed that average DTAR of Islamic banks were higher than conventional banks. The two means are statistically not significant at 5% significance level (See Table 14).

Table 9. DTAR Of Islamic And Conventional Banks For 2010 Till 2015

DTAR	Islamic Banks	Conventional Banks
2010	0.069	0.085
2011	0.079	0.086
2012	0.090	0.087
2013	0.108	0.068
2014	0.144	0.055
2015	0.041	0.045
Mean	0.089	0.071

Standard deviation	0.03536	0.01797

Equity Multiplier (EM)

The analysis of EM indicated that Islamic banks' EM was higher than conventional banks which indicated high risk. Both Islamic and conventional banks had the same ratios in 2010, wherein conventional banks remained with steady ratios while it decreased in 2013 until 2015. Moreover, Islamic banks EM started to increase until it declined in 2015. Table 10 showed the average EM of Islamic banks is higher than conventional banks. The results indicated that the difference of the two means is statistically significant at 5% significance level (See Table 14).

Table 10. EM Of Islamic And Conventional Banks For 2010 Till 2015

EM	Islamic Banks	Conventional Banks
2010	7.818	7.780
2011	8.063	7.791
2012	8.185	7.854
2013	8.216	7.596
2014	8.180	7.450
2015	7.751	7.443
Mean	8.04	7.65
Standard deviation	0.20260	0.18147

EFFICIENCY RATIOS

Asset Utilization (AU)

Both Islamic and conventional banks had high AU. Nonetheless, Islamic banks AU were somewhat higher than conventional banks. According to Table 11, Islamic banks' AU was steady whereas conventional banks' AU was stable until it started to increase from 2013 to 2015. Average AU of Islamic banks were higher than conventional banks. T-test indicated that the difference of the two means is significant at 5% level of significance (See Table 14).

Table 11. AU Of Islamic And Conventional Banks For 2010 Till 2015

AU	Islamic Banks	Conventional Banks
2010	0.050	0.040
2011	0.050	0.039
2012	0.049	0.039
2013	0.048	0.043
2014	0.048	0.046
2015	0.048	0.050
Mean	0.049	0.043
Standard deviation	0.00112	0.00425

Income to Operating Expenses Ratio (IER)

Table 12 showed that conventional banks' IER was higher than Islamic banks. During 2010-2015, conventional banks' IER was escalating by 5% except year 2013 and 2014 where it decreased by 11%, then, decreased by 13%. In 2015, the ratio increased by 36% and became 1.74. Furthermore, Islamic banks' IER was increasing from 2010 to 2015 by 2% to 5%. The table also showed that IER ratios of both banks are converging with each other in 2015. The average of IER of both banks indicated that conventional banks had higher ratio. Statistically, there is a significant difference at 5% level of significance (See Table 14).

Table 12. IER Of Islamic And Conventional Banks For 2010 Till 2015

IER	Islamic Banks	Conventional Banks
2010	1.602	2.469
2011	1.672	2.608
2012	1.715	2.676
2013	1.761	2.370
2014	1.853	2.040
2015	1.853	1.742
Mean	1.74	2.32
Standard deviation	0.10025	0.35962

Operating Efficiency (OE)

OE ratio is another measure of efficiency has indicated that Islamic banks are more efficient than conventional banks in generating more operating revenue and managing their operating expenses. Islamic banks' OE was decreasing tardily while conventional banks' OE was oscillating during 2010-2015. The ratio was declining until 2013 as it increased by 15%. In Table 13, it is also shown that in 2014, OE increased by 10% and then increased by 7% in 2015. Moreover, the results indicated that the average OE of Islamic banks was higher than conventional banks. The t-test showed that statistically there is the difference between the two means is not significant at 5% level of significance (See Table 14).

Table 13. OE Of Islamic And Conventional Banks For 2010 Till 2015

OE	Islamic Banks	Conventional Banks
2010	0.616	0.493
2011	0.587	0.459
2012	0.576	0.447
2013	0.572	0.517
2014	0.574	0.570
2015	0.551	0.609
Mean	0.58	0.52
Standard deviation	0.00021	0.00063

Table 14 Presented The T-Test Results of Islamic And Conventional Banks.

Table 14. T-Test and Correlation Analysis Results

Measurements	t- test	Correlation
ROA	0.012584963	0.899967858
ROE	0.166206193	0.36957501
PER	0.649306123	-0.735286767
LDR	0.000816897	0.918333547
CDR	0.012862046	-0.888708972
LAR	8.14213E-07	0.983219987
DER	0.120400618	0.015822149
DTAR	0.325479264	-0.030568441
EM	0.013585891	0.144327287
AU	0.034529013	-0.770899283
IER	0.024828548	-0.804067741
OE	0.102542786	-0.583443384

CONCLUSION

This study conducted to investigate the financial performance of 3 Islamic banks and 3 conventional banks using interbank comparison analysis during the period 2010-2016. First, profitability analyses demonstrate that Islamic banks are more profitable and are significantly different from conventional banks in Return on Assets (ROA). However, Return on Equity (ROE) and Profit Expense Ratio (PER) do not show statistically significant difference between the performance of Islamic banks and their counterpart which mean that Islamic banks do not control their expenses efficiently. Liquidity measures of Loan to Deposit Ratio (LDR), Cash Deposit Ratio (CDR), and Loan to Asset Ratio (LAR) indicate that there is significant difference between the performances of Islamic and conventional banks and do not reject the

hypothesis that Islamic banks are more liquid than conventional banks. These results imply the financial health of Islamic banks, thus, conventional banks are exposed to more liquidity risk compared to Islamic banks. Examination of risk and solvency measures i.e. Debt to Equity Ratio (DER) and Debt to Total Assets Ratio (DTAR) do not show statistically significant difference between the performance of Islamic and conventional banks. Therefore, reject the hypothesis that Islamic banks are more risky than conventional banks and do not reject null hypothesis. However, Islamic banks are significantly different from their counterpart in terms of Equity Multiplier (EM) which indicates that Islamic banks are financing their asset purchases by using more debt than equity. Analysing efficiency measures, Asset Utilization (AU) and Income to Operating Expenses Ratio (IER) of the two sets of banks support the hypothesis that Islamic banks are more efficient than conventional bank. Thus, Islamic banks are utilizing their assets and generating income efficiently. Unlike Operating Efficiency (OE) which shows that difference of the two banks is not statistically different which mean that conventional banks are efficient in term of managing their expenses.

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