

THE BANKING INDUSTRY DURING AN EXTENDED FINANCIAL CRISIS: AN EMPIRICAL ASSESSMENT OF KUWAIT BANKS

Yaser A. AlKulaib, Kuwait University
Fahad W. Almudhaf, Kuwait University
Sulaiman A. Al-Jassar, Kuwait University

ABSTRACT

This study investigates and compares the performance of Islamic banks and conventional banks in Kuwait by using financial measures and a Student's t-test. Empirical results for the period 2007–2010 show that Islamic banks outperformed conventional banks in terms of liquidity measured by the current ratio. However, no statistically significant difference in terms of profitability was observed. Moreover, Islamic banks had significantly lower deposit liabilities to assets, loans to assets, and loans to deposit liabilities ratios. In general, conventional banks seemed to have less systematic risk than Islamic banks. The Sharpe ratios for both types of banks were similar in Kuwait. Conventional banks were far more active than Islamic banks in Kuwait in terms of average Kuwaiti dinar business.

Keywords: Islamic bank, conventional bank, financial performance, financial ratio, GCC, Kuwait

INTRODUCTION

After the financial crisis of 2008 and its negative impact on the banking industry, many investors and depositors began to worry about their investments and deposits. Currently, the European debt crisis that began in July 2011 is making headlines. Such negative economic news and negative bank performance attracts the attention of investors, raising questions such as whether the banks in which they have invested can continue operations and which banks will face hard economic conditions. Therefore, the evaluation of bank performance is important for depositors, investors, managers, and regulators. The impact of the financial crisis that originated in the United States and the euro zone has hit the rest of the world. The Gulf Cooperation Council [GCC, made up of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE)] was one region affected by this crisis, which had a negative impact on GCC banks in terms of non-performing loans and a decrease in profits. In the GCC, banks can be divided into two categories: conventional banks and Islamic banks.

The Kuwaiti banking system began in 1941, when the first banking and financial institution in Kuwait, a branch of the British “Iranian Imperial Bank” (as it was known at the time) opened. On May 19, 1952, the first Kuwaiti bank, the National Bank of Kuwait (NBK), was formed; NBK began operating on November 15, 1952. In 1977, Islamic banking was launched in Kuwait with the establishment of the first Kuwaiti Islamic bank, Kuwait Finance House (KFH).

Currently, there are 21 banks operating in Kuwait, of which 11 are Kuwaiti banks and 10 are foreign. Competition in the banking industry has a direct effect on the efficiency of financial services, the quality of financial products, and the degree of innovation and stability. This competition has led to the development of high-risk instruments with a high level of risk exposure that allow banks to gain a high level of profit. Therefore, banks in Kuwait have high credit exposures to real estate and investment companies, which means that they are exposed to significant risk. Real estate and investment companies are considered high risk because they are highly volatile given the limited diversification of the economy.

In this paper, we focus on two main questions involving the Kuwaiti banking sector and the GCC state: (1) Have Kuwaiti banks been affected by the financial crisis? and (2) Is there any difference in the effect of the financial crisis between conventional and Islamic banks? This paper examines the effect of the financial crisis on Kuwaiti banks. We will examine the differences between Islamic and conventional banks’ performance after the financial crisis during 2007–2010 using financial ratios and a t-test.

Our analysis incorporates the extended bear-period beginning with the start of the financial crisis in 2008. Our study extends the literature by presenting evidence using data from Kuwait, which is a frontier market that has not been previously covered in terms of bank performance during the global financial crisis. The results of our study should be beneficial to individual investors, institutional investors, and portfolio managers interested in investing in the banking industry as well as to governments.

The paper is divided into four parts. First, the literature review discusses previous studies conducted on this topic, outlines the beginnings of the Kuwaiti banking industry, defines Islamic banking, and explains the differences between Islamic and conventional banks. Second, we explain the data set and methodology. Third, we undertake the analysis of our empirical results and discuss it from the perspectives of Kuwaiti and global investors and governments. Finally, we offer a conclusion.

LITERATURE REVIEW

Although a large number of empirical studies have been conducted on developed and developing countries, few empirical studies have addressed the GCC or Kuwait. The papers that do examine the banking industry in Kuwait and the GCC do so in terms of competition within the industry. Few empirical studies have been conducted regarding performance differences

between Islamic and conventional banks. We did not find any papers covering the financial performance of Islamic and conventional banking in Kuwait.

In this section, we will shed light on the banking industry in Kuwait. In addition, we will explain what Islamic banking means. In addition, we will discuss the differences between conventional and Islamic banking and explain some of the terms of Islamic banking. Finally, we will review the important previous research about banking performance.

Banking Industry in Kuwait

The Kuwaiti banking system began in 1941 with the opening of a branch of the British Iranian Imperial Bank. The first Kuwaiti bank was the NBK, which was established in May 1952 and started operations in November 1952. In 1977, Islamic banking began in Kuwait with the establishment of KFH.

Since KFH was launched, there has been high demand for Islamic finance by individuals and institutions. The Central Bank of Kuwait (CBK) prohibited conventional banks from engaging in any activities based on Islamic finance, and the demand therefore led to the establishment of two new Islamic banks and led two conventional banks to transfer to full Islamic banking licenses.

Before 2004, only one foreign bank operated in Kuwait. However, in 2004, the national assembly passed an amendment allowing branches of foreign banks to operate in the domestic market, although only one branch would be allowed for each foreign bank. As a result, nine new foreign banks have opened since the new law. In this paper, we focus on listed Kuwaiti banks because their financial information is available.

Table 1 shows that four out of the nine listed banks are Islamic. The market capitalization (market cap) of conventional banks is almost double that of the Islamic banks due to NBK's market cap. NBK is the largest bank in Kuwait in terms of market cap and net income. It was the first national bank in Kuwait and has the largest network of branches. In the late 1990s, NBK began to show interest in Islamic banking because of client demand and business growth in the Islamic banking sector. NBK started buying shares of an Islamic bank and now holds more than 45% of Boubyan Bank shares, with plans to increase ownership in 2012.

Islamic banking

In the early 1970s, Islamic banks were started in some Arab countries such as Egypt, Saudi Arabia, and Kuwait, and the interest in Islamic banking extended into Western financial institutions. In the early 1990s and 2000s, the Islamic banking industry attracted a number of Western multinational financial institutions, such as Citigroup and HSBC, which started offering Islamic financial products in some Arab countries, such as Bahrain, Kuwait, and the UAE.

Table 1: Sample of Kuwaiti banks, Jun 28, 2012						
Name	Market Cap. (mil. KWD)	Rank by Market Cap.	Type of Banking	2011 EPS (Fils)	2011 Cash Dividends (Fils)	Book Value (Fils)
Panel A: All Banks						
NATIONAL BANK OF KUWAIT	4408.4	1	Conventional	77	40	521
KUWAIT FINANCE HOUSE	2111.1	2	Islamic	30.2	15	659
GULF BANK OF KUWAIT	1122.4	3	Conventional	12	-	170
BOUBYAN BANK K.S.C	1082.8	4	Islamic	4.6	-	141
COMMERCIAL BANK OF KUWAIT	992.1	5	Conventional	0.6	-	408
AHLI UNITED BANK	937.5	6	Islamic	31.1	15	241
AL-AHLI BANK OF KUWAIT	883.6	7	Conventional	35	15	323
BURGAN BANK	627.2	8	Conventional	35.3	10	305
KUWAIT INTERNATIONAL BANK	238.1	9	Islamic	11.6	5	222
Total	12403.2					
Panel B: Conventional Banks						
NATIONAL BANK OF KUWAIT	4408.4	1	Conventional	77	40	521
GULF BANK OF KUWAIT	1122.4	2	Conventional	12	-	170
COMMERCIAL BANK OF KUWAIT	992.1	3	Conventional	0.6	-	408
AL-AHLI BANK OF KUWAIT	883.6	4	Conventional	35	15	323
BURGAN BANK	627.2	5	Conventional	35.3	10	305
Total	8033.7					
Panel C: Islamic Banks						
KUWAIT FINANCE HOUSE	2111.1	1	Islamic	30.2	15	659
BOUBYAN BANK K.S.C	1082.8	2	Islamic	4.6	-	141
AHLI UNITED BANK	937.5	3	Islamic	31.1	15	241
KUWAIT INTERNATIONAL BANK	238.1	4	Islamic	11.6	5	222
Total	4369.5					
Source: Bayan Investment						

Islamic banking is based on the principles of an Islamic economic framework in accordance with Islamic law (Sharia'h). Sharia'h deals with many topics addressed by secular law, including crime, politics, and economics, as well as personal matters such as sexual intercourse, hygiene, diet, prayer, and fasting. There are two primary sources of Islamic law: the precepts set forth in the Quran, and the example set by the Islamic prophet Muhammad in the Sunnah. All dealings, transactions, products, investments, and responsibilities in Islamic banking institutions are derived from Sharia'h law, which leads to significant differences from conventional banking, as can be seen in Table 2.

The foundation of Islamic banks is the Islamic faith and these banks must stay within the limits of Islamic Law or the Sharia'h in all their actions and deeds. The most important governing principles of an Islamic bank are the absence of interest-based (riba) transactions and the avoidance of economic activities involving speculation (gharar). Riba means interest and is forbidden in Islamic economic jurisprudence (fiqh) and considered as a major sin. Simply, riba is defined as unjust gains in trade or business, generally through exploitation. Gharar means risk,

uncertainty, and hazard. Unlike *riba*, *gharar* is not precisely defined. *Gharar* is also considered to be of lesser significance than *riba*.

Conventional Banks	Islamic Banks
1. The functions and operating modes of conventional banks are fully based on secular laws.	1. The functions and operating modes are based on the principles of <i>Sharia'h</i> law.
2. The investor is assured a predetermined rate of interest.	2. Risk is shared between the provider of capital (investor) and the user of the funds (entrepreneur).
3. The aim is to maximize profit, with no restrictions.	3. Profit is maximized subject to <i>Sharia'h</i> restrictions.
4. <i>Zakat</i> does not apply.	4. <i>Zakat</i> collection is a main service-oriented function, and banks pay out <i>Zakat</i> as well.
5. Lending money at a compound interest rate is the fundamental function.	5. Participation in partnership businesses is the fundamental function, requiring banks to understand customers' businesses very well.
6. Defaulters can be charged penalties and compounded interest.	6. The defaulters can be charged only a small amount of extra money, and this money is donated to charity. Rebates are given for early settlement at the bank's discretion.
7. The bank's own interests are often at the forefront. There is no effort to ensure equity growth.	7. Importance is placed on the public interest. The ultimate goal is to ensure equity growth.
8. For interest-based commercial banks, borrowing from the money market is relatively easier.	8. Borrowing must be based on a <i>Sharia'h</i> - approved underlying transaction.
9. Since income from advances is fixed, little importance is placed on developing expertise in project appraisal and evaluations.	9. Greater attention is paid to project appraisals and evaluations, because the bank shares the profit or loss.
10. Greater emphasis is placed on clients' creditworthiness.	10. Greater emphasis is placed on project viability.
11. The relationship with clients is that of a creditor to debtors.	11. The relationship with clients is that of a partner, investor, and trader to a buyer and seller.
12. All deposits must be guaranteed.	12. Deposits are only guaranteed for the deposit amount, based on the principle of <i>al-wadiah</i> . If the account is based on the <i>mudarabah</i> concept, clients share in a loss position.
Source: Abd Rahman, Z. (2007)	

Islamic banking promotes risk sharing between the provider of capital (the investor) and the user of the funds (the entrepreneur). Like any bank, Islamic banks aim to maximize profit, but they are subject to *Sharia'h* restrictions. Islamic loans require participation in a partnership business, which is the fundamental function of the Islamic banks. As a result, Islamic banks have to understand their customers' businesses very well. Islamic banks have no provision to charge the defaulters any extra money if the charge is specified in amount rather than in percentage. Rebates are given for early settlement at the bank's discretion and after full payment by the client. All Islamic bank activity must be based on *Sharia'h*-approved underlying transactions.

Islamic banks share in client profit and loss, and as a result, Islamic banks pay greater attention to developing project appraisals and evaluations. Islamic banks view their clients as partners, investors, traders, buyers, and sellers, rather than the creditor and debtor relationship seen in conventional banks. Islamic banks cannot guarantee all deposits, as do conventional

banks. Islamic banks can only guarantee deposits based on the principle of al-wadiah (guaranteed custody); thus, depositors are guaranteed repayment of their funds. However if the account is based on the mudarabah concept, clients have to share in a loss position. Mudarabah is a special kind of partnership where one partner provides the capital (rabb-ul-maal) to the other (mudarib) for investment in a commercial enterprise.

Previous empirical work

Following new developments in the financial sector around the globe after the recent financial crisis, the banking industry in GCC countries has undergone major changes. Many papers have studied the banking industry in Kuwait, but most of the papers examine the period before the financial crisis in 2008. For example, Hussain and Mahmood (2011) and Al-Mutairi and Al-Omar (2009) used samples from before 2008. However, our study is up to date and reflects the recent economic changes.

The level of competition in the banking industry in Kuwait has been the focus of many authors. Al-Mutairi and Al-Omar (2009) investigated the degree of competition in the banking industry in Kuwait during the period from 1993 to 2005. They found an indication that the banking industry is highly concentrated and operates under monopolistic competition. The result was the same regardless of whether the interest income or its ratio to total assets was used.

This finding was repeated by Hussain and Mahmood (2011). They analyzed the market structure and competitive industry in Kuwait. The authors employed panel data for banks covering the period 2000–2007 to estimate a reduced-form revenue equation model. They showed that the banking market in Kuwait was contestable, and during the sample period, Kuwaiti banks earned their revenues as if operating under conditions of monopolistic competition. Abdul-Al and Alawin (2010) used bank credit ratio as an indicator of bank development. Their results indicated the significant role of a bank's credit ratio in monitoring banking development. In addition, they showed that a positive movement of the stock market significantly and positively affects economic growth.

The literature on Islamic banking may be divided into theoretical and empirical works. The empirical papers examine the under-performance and over-performance of Islamic banking versus conventional banking. Several papers have examined the performance of Islamic bank versus conventional banks, but we could find any studies that cover Kuwait or the GCC; most of the papers address the banking industry in Pakistan. The interesting part is that the findings are different, as we will see later. Ashraf and Zai-ur-Rehman (2011) studied the performance of Islamic banking and conventional banking systems using financial measures. They used a sample of only four banks, using data from 2007–2010. They established that Islamic banks were less effective because of augmented operating cost and inefficient management. They reached that conclusion using ratios of profitability, earnings, liquidity, credit risk, and asset activity to compare the performance of Islamic banks and the conventional banking system. According to the authors, the Islamic banking system in Pakistan was focused on short-term

commercial activities to prove its worth in the market. Finally, the authors suggested that Islamic banking in Pakistan must concentrate on increasing market share and reducing expenses by making strategic, synergistic decisions.

Kouser et al. (2011) performed a CAMELS analysis (capital adequacy, asset quality, management quality, earnings, liquidity, sensitivity to market risk) of the performance of Islamic and conventional banks. The sample comprised 10 banks with financial data from 2006–2010. They found that Islamic banks were not in very robust financial health compared to conventional banks in Pakistan. According to the authors, there was a need for improvement, expansion, and increased awareness in the Islamic banking system in Pakistan. They did not find any performance ratios that were better for Islamic banks than for conventional banks. One of the implications they found was that Islamic banks were not operating at the level of conventional banks, since Pakistan has used conventional banking since it was formed, and the operational level of conventional banks is better than that of Islamic banks.

Few studies have found that Islamic banks do better than conventional banks. Contrary to previous studies, a study by Ansari and Rehman (2011) found that Islamic banks were more liquid, less risky, and more operationally efficient than conventional banks. The paper's motive was, like earlier papers, to compare the financial performance of Islamic and conventional banks. The authors calculated 18 financial ratios for the period 2006–2009. They found that Islamic banks did not rely more on borrowed funds and their percentage of assets tied up in loans was lower than for conventional banks, and that Islamic banks' ability to pay back their debtors is high.

Pakistan is not the only country that has been examined in terms of Islamic banking; other papers have focused on other Muslim countries such as Bahrain and Malaysia. Samad (2004) examined the comparative performance of Bahrain's Islamic banks and conventional commercial banks during the post-Gulf War period with respect to profitability, liquidity risk, and credit risk. The sample was from 1991–2001, and a total of nine financial ratios were used to measure performance. The findings showed no major difference in performance between Islamic and conventional banks with respect to profitability and liquidity. However, there was a significant difference in credit performance. Finally, the paper found that Islamic banks were exposed to less credit risk than conventional banks, and their credit performance was superior to that of conventional banks. On that note, a study by Samad and Hassan (1999) supported some of the earlier findings by Samad (2004). Samad and Hassan (1999) found the Islamic banks in their study to be relatively more liquid and less risky when compared to eight conventional banks.

Our paper extends the literature in several important dimensions. Our study is current (covers the period 2007–2010) and reflects the recent economic changes. The study extends the literature by presenting evidence using data from Kuwait. What's more, Kuwait is considered a frontier market that has not been previously covered in terms of bank performance after the

global financial crisis. The results of our study should be beneficial to depositors, investors, and portfolio managers interested in investing in the banking industry, as well as to governments.

METHODOLOGY

In this study, we use financial ratio measures to evaluate banks' performance. The financial ratio measure method is not new in the banking literature. The method was used as early as the 1970s by O'Connor (1973) and Libby (1975). The method is also found in many studies, such as Chen and Shimerda (1981), Ross (1991), Sabi (1991), Spindler (1991), and Hempel and Simonson (1998). The advantage of the financial ratio method is that it compensates for bank disparities. Since banking firms are not equal in assets, market cap, deposits, and loans, the use of ratios removes any disparities and sets banks at par.

The paper examines the comparative performance of Kuwaiti Islamic banks and conventional commercial banks during and after the financial crisis of the 2008 period with respect to (a) profitability, (b) liquidity risk, (c) credit risk, (d) structural ratios, (e) risk ratios, and (f) market ratios.

Our analysis incorporates the recent extended bear period in the stock market starting with the financial crisis in 2008. We use a Student's t-test to check the statistical difference between conventional and Islamic banks in Kuwait. We use ANOVA to test the null hypothesis of the equality of means of financial ratios between Islamic and conventional banks.

DATA

In this study, four Islamic banks and five conventional banks, representing all banks listed on the Kuwait Stock Exchange, were considered. The data covers the period 2007–2010. Data were collected from several sources. We used Reuters Xtra 3000, reports from Institute of Banking Studies in Kuwait, and company reports.

The performance variables used in this study are: liquidity measures (current assets to assets, current assets to deposit assets, and current ratios), profitability measures (banking income to assets ratio, net banking income to assets ratio, ROA, and ROE), structural measures [(equity ratio, deposit liabilities to equity ratio, deposit liabilities to assets ratio, debt ratio, and non-performing loans (NPL)], risk measures (beta, Sharpe ratio), and other measures [(assets per employee, banking income per employee, staff expense per employee, net income per employee, price to earnings (P/E), and price to book value P/BV)].

EMPIRICAL RESULTS

Following Samad (2004), who covered Bahraini banks, we begin our analysis by calculating the mean and standard deviation for selected items on the balance sheets and income statements of Kuwaiti banks, as shown in Table 3.

Table 3: Performance Measures in Terms of Volume (Million KWD)						
Variable	Islamic Banks		Conventional banks		t-value	p-value
	Mean	Standard Deviation	Mean	Standard Deviation		
Total Loans	9,846.210	2,150.884	17,196.002	1,366.426	12.08	0.00
Total Assets	14,019.113	3,129.273	28,452.320	776.515	11.25	0.00
Total Deposits	11,056.349	2,723.438	23,647.688	761.734	9.97	0.00
Net Income	174.251	144.240	383.177	255.370	1.98	0.14
Total Equity	1,992.522	254.907	3,634.263	559.890	7.68	0.00

Source: Research Unit—Institute of Banking Studies of Kuwait

We note that Islamic banks in Kuwait have a smaller volume of operations compared to conventional banks. Conventional banks have a statistically significantly larger volume of Kuwaiti dinar (KWD) business than Islamic banks. The mean total loans of conventional banks are 17,196 million KWD, compared to a mean of 9,846 million KWD for Islamic banks in Kuwait. Similarly, the total assets and total deposits of conventional banks are much larger than those of Islamic banks in Kuwait, as shown in Table 3. The net income of conventional banks is almost double that of Islamic banks, at 174 million KWD and 383 million KWD, respectively. Therefore, conventional banks are far ahead of Islamic banks in Kuwait in terms of average KWD business. In Kuwait, compared to Islamic banks, conventional banks are more established and have a more experienced staff. This is consistent with the results of Samad (2004) and Ansari and Rehman (2011).

Table 4 shows various ratios (liquidity, credit, risk, profitability, market) of the conventional and Islamic banks in Kuwait.

Islamic banks have a statistically significantly better current ratio than conventional banks. The current ratio of Islamic banks is 1.03, compared with a current ratio of 0.82 for conventional banks. However, conventional banks have better current-assets-to-assets and current-assets-to-deposit-liabilities ratios, which are also liquidity measures. This is in contrast with the results in relation to the measures of liquidity obtained by Samad(2004). However, our findings are somewhat consistent with the results of Samad and Hassan (1999) and Ansari and Rehman (2011).

Islamic banks have a slightly higher return on assets (ROA) than conventional banks, at 1.46% and 1.36%, respectively. However, looking at the t-values and p-values, we note that the differences are not statistically significant. This is true for all profitability measures used in

Table 4 (banking income to assets ratio, net banking income to assets ratio, ROA, and ROE). There is no significant difference in any of the profitability ratios shown in Table 4. This result is consistent with Ansari and Rehman (2011) and Kouser et al. (2011).

Table 4: Financial Performance of Islamic and Conventional Banks in Kuwait			
Performance Measure	Islamic Bank Mean	Conventional Bank Mean	p-value
Liquidity Measures			
Current assets to assets	57.98%	69.80%	0.028
Current assets to deposit liabilities	73.83%	83.86%	0.021
Current assets to current liabilities	102.64%	81.96%	0.009
Asset/Liability structural Measures			
Equity to assets	14.46%	12.79%	0.338
Deposit liabilities to equity-times	5.49	6.64	0.240
Deposit liabilities to assets	78.53%	83.20%	0.048
Liabilities to assets	85.54%	87.21%	0.338
Loans to assets	70.28%	60.37%	0.008
Loans to deposit liabilities	89.54%	72.58%	0.015
Loans to equity-times	4.90	4.81	0.869
NPL to loans	6.59%	6.51%	0.961
Profitability Measures			
Banking income to assets	7.01%	6.18%	0.109
Net banking income to assets	3.03%	2.54%	0.496
Return on assets (ROA)	1.46%	1.36%	0.877
Return on equity (ROE)	9.43%	10.24%	0.822
Other Measures			
Assets per employee (000 KWD)	4,044.131	4,402.438	0.094
Banking income per employee (000 KWD)	278.995	271.527	0.138
Staff expense per employee (000 KWD)	37.232	26.635	0.001
Net profit per employee (000 KWD)	55.706	59.713	0.863
P/E Ratio	31.003	35.403	0.840
P/BV Ratio	2.803	2.400	0.256
Source: Research Unit—Institute of Banking Studies of Kuwait			

Next, we measure some structural ratios regarding the mixture of debt and equity in Kuwaiti banks. We notice that the average ratio of loans to assets of Islamic banks is significantly higher than that of conventional banks, at 70% and 60%, respectively. The same is true for the average loans to deposit liabilities, with 89% for Islamic banks compared to 73% for conventional banks. There is no significant difference between NPL to loans ratio between Islamic and conventional banks in Kuwait, as shown in Table 4, as they are both almost 6.5%.

The average P/E and P/BV of Islamic and conventional banks are not statistically significantly different. This means that investors do not view either type of bank to have more implied growth or different risk in terms of valuing the stocks.

Staff expense per employee is significantly higher in Islamic banks. Conventional banks had an average staff expense per employee of 27,000 KWD, while it was 37,000 KWD for Islamic banks; this indicates that conventional banks are more cost efficient. This is similar to the results of Ashraf and Zia-ul-Rahman (2011).

Table 5 shows the risk and return measures for Kuwaiti banks. After calculating the beta of each bank stock, we find the average beta of Islamic banks compared with that of conventional banks. We find that the average beta of Islamic banks is higher than that of conventional banks: 0.88 for Islamic banks compared to 0.72 for conventional banks. This means that Islamic banks have more systematic risk (market risk). They are more affected by fluctuations and volatility in the overall market. This is true when the market is bullish and bearish, as shown by the up and down betas. Therefore, Islamic banks are considered riskier than conventional banks in terms of beta.

	Average All	Average Islamic	Average Conventional
Beta 5-Year Monthly	0.79	0.88	0.72
Beta Up 5-Year Monthly	0.97	1.14	0.84
Beta Down 5-Year Monthly	0.77	0.89	0.66
Sharpe Ratio 5-Year Monthly	0.11	0.12	0.10

Source: Reuters Xtra 3000

The reward-to-variability ratio (Sharpe ratio) is similar when comparing Islamic and conventional banks, as shown in Table 5. Islamic banks have a slightly higher Sharpe ratio of 0.12, while conventional banks have a Sharpe ratio of 0.10. Investors always prefer higher Sharpe ratios; however, the difference here is not significant.

	2006	2007	2008	2009	2010	2011	Average
NBK	27.60%	27.60%	27%	28.90%	28.50%	28.60%	28.03%
KFH	21.90%	22.90%	23.10%	23.60%	24.80%	25.40%	23.62%
Gulf Bank	16.60%	15.40%	13.50%	12.10%	11.60%	11.80%	13.50%
Burgan	6.10%	6.60%	8.30%	8.30%	7.80%	7.90%	7.50%
CBK	9.70%	10.30%	9.40%	8.90%	8.50%	7.50%	9.05%
ABK	9.20%	8.70%	8.30%	7.50%	7.30%	7.20%	8.03%
AUB	5.90%	5.80%	5.70%	5.80%	5.90%	5.60%	5.78%
Boubyan	n/a	n/a	1.80%	2.10%	3%	3.60%	2.63%
KIB	3.10%	2.70%	2.80%	2.80%	2.60%	2.40%	2.73%

Source: Deutsche Bank, company data

Deutsche Bank published a recent report with data on the market shares of loans and deposits in Kuwait. Table 6 shows the market share of loans for Kuwaiti banks for the period 2006–2011. We note that NBK, which is a conventional bank, has the largest market share of

loans in the market. NBK has an average market share of 28%, followed by KFH with a market share of 23%. As of 2011, Islamic banks have a market share of loans of around 37%, while conventional banks have 73% of the market share of loans.

Table 7 shows the market share of deposits for Kuwaiti banks for the period 2006–2011. Similarly, KFH and NBK are the largest two banks in Kuwait in terms of deposit market share. Overall, Islamic banks have a smaller market share of loans in the Kuwaiti market (41%) compared to conventional banks (59%)

	2006	2007	2008	2009	2010	2011	Average
NBK	25.10%	24.20%	22%	25.20%	23.80%	22.90%	23.80%
KFH	21.30%	23.60%	25.80%	27.70%	28.50%	29.90%	26.13%
Gulf Bank	16.20%	14.10%	14.90%	12.00%	11.40%	11.20%	13.30%
Burgan	7.40%	7.30%	9.40%	9.30%	9.50%	9.40%	8.72%
CBK	10.00%	11.60%	10.30%	7.80%	8.50%	7.60%	9.30%
ABK	9.00%	9.70%	7.80%	7.00%	7.50%	7.10%	8.02%
AUB	6.10%	5.60%	5.60%	5.60%	4.80%	5.60%	5.55%
Boubyan	1.50%	1.40%	2.20%	2.70%	4%	4.00%	2.55%
KIB	3.20%	2.50%	2.50%	2.70%	2.60%	2.30%	2.63%

Source: Deutsche Bank, company data

CONCLUSION

The objective of this paper was to compare the financial performance of all listed Islamic and conventional banks in Kuwait for the period 2007–2010. We used the method of financial ratio measures along with ANOVA and a Student's t-test to assess the statistical difference between Islamic and conventional banks. Our study ascertained that compared to Islamic banks, conventional banks in Kuwait have a smaller volume of operations, as shown by their total assets, loans, and equity. Islamic banks in Kuwait have a better current ratio (more liquid) and are more risky (larger beta) and less operationally efficient. There is no significant difference in terms of profitability (ROA and ROE) for Islamic banks and conventional banks in Kuwait. Conventional banks have a larger market share of both loans and deposits compared to Islamic banks.

REFERENCES

- Abd Rahman, Z. Differences between Islamic banks and conventional [Online article]. Retrieved February 22, 2007, from http://www.zaharuddin.net/index.php?option=com_content&task=view&id=297&Itemid=72
- Abdul-Al, S.A. & M.A. Alawin (2010). Financial and banking development in selected MENA countries. *Arab Journal of Administrative Sciences*, 17(3), 511–535.

-
- Al-Mutairi, A.K. & J.A. Al-Omar (2009). Competition in the Kuwaiti banking sector. *Arab Journal of Administrative Sciences*, 16(2), 232–334.
- Al-Obaidan, A.M. (2002). Efficiency effect of mega-banking the case of the commercial banking industry in the State of Kuwait. *Arab Journal of Administrative Sciences*, 9(2), 179–196.
- Ansari, S., & A. Rehman (2011). Financial performance of Islamic and conventional banks in Pakistan: A comparative study. *Proceedings of the Eighth International Conferences on Islamic Economic and Finance*.
- Ashraf, M.M., & Zia-ur-Rehman (2011). The performance analysis of Islamic and conventional banks: The Pakistan's perspective. *Journal of Money, Investment and Banking*, 22, 99–113.
- Chen, K.H. & T. Shimerda (1981). An empirical analysis of useful financial ratios. *Financial Management*, 10(1), 51–60.
- Hempel, G.H. & D.G. Simonson (1998). *Bank management*. New York, NY: John Wiley and Sons, Inc.
- Hussain, A.A. & Z. Mahmood (2011). Competitiveness and market contestability: An empirical assessment of the banking industry in Kuwait. *Arab Journal of Administrative Sciences*, 18(1), 109–134.
- Kouser, R., M. Aamir, H. Mehvish, & M. Azeem (2011). CAMEL analysis for Islamic and conventional banks: Comparative study from Pakistan. *Economics and Finance Review*, 1(10), 55–64.
- Libby, R. (1975). Accounting ratios and the prediction of failure: Some behavioral evidence. *Journal of Accounting Research, Spring*, 150–161.
- O'Connor, M.C. (1973). On the usefulness of financial ratios to investors in common stock. *The Accounting Review, April*, 339–353.
- Ross, P.S. (1991). *Commercial bank management*. Boston, MA: Irwin.
- Sabi, M. (1996). Comparative analysis of foreign and domestic bank operation in Hungary. *Journal of Comparative Economics*, 22(2), 179–188.
- Samad A. (2004). Performance of interest-free Islamic banks vis-à-vis interest-based conventional banks of Bahrain. *Journal of Economics and Management*, 12(2), 1–15.
- Samad, A. & M.K. Hassan (1999). The performance of Malaysian Islamic Bank during 1984–1997: An exploratory study. *International Journal of Islamic Financial Services*, 1(3), 3–11.
- Spindler, A. (1991). The performance of internationally active banks and securities firms. Federal Reserve Bank of New York (staff study).