The Impact of Global Financial Crisis on the Stability of Islamic Banks: An Empirical Evidence

Mosab I. Tabash¹ and Raj S. Dhankar²

Abstract

Islamic banking and finance is one of the fastest growing segments of the global banking industry and has risen to prominence recently through its distinctive characteristics. The emergence of Islamic finance can be traced back to 1963 in Egypt, while its importance comes to the global financial system only after the global financial crisis occurred in 2008. Many earlier studies have discussed theoretically the relevance of Islamic finance principles and instruments in achieving financial stability under different financial situations. However, few studies have empirically examined the relationship between Islamic banking and financial stability. To help in filling this gap in empirical literature, this study attempts to examine the impact of global financial crisis on the key performance ratios of all full-fledged-Islamic banks working in the Kingdom of Saudi Arabia (KSA). To document the relationship between the performance of Islamic banks and financial stability, time series data from 2005 to 2010 for all fledged-Islamic banks working in KSA are used. Firstly, the trend analysis method is utilized where yearly financial ratios of Islamic banking sector are computed using Microsoft Excel. For the analysis, liquidity ratios and capital adequacy ratios are determined. Secondly, One Way Analysis of Variance (ANOVA) is used to test hypotheses using SPSS. Our empirical results show that Islamic banking sector is more stable sector in terms of, capital adequacy, and liquidity in the period under study. The results of the Kingdom of Saudi Arabia are supporting the viewpoint that Islamic finance is more stable and safe way of financing.

Keywords: Islamic banking, Financial stability, KSA, Financial crisis

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1. Introduction

Islamic finance industry has shown a tremendous growth. Recent data published by Islamic Finance Service Board (IFSB) on Islamic Financial Services Industry Report 2013 show a strong growth of 38.4% during the period of 2004-2011. The cross-border Islamic finance activities have also increased simultaneously. The 2008 financial crisis led to difficulties in many conventional banks across the globe. Islamic banks, in contrast, were largely insulated from the crisis their highly regulated operational environment guided by Shariah principles prohibited investment in the type of instruments which adversely affected conventional banks and which prompted the crisis.

The impressive growth rate of Islamic finance and its stability during financial crisis attracts the attention of many policy makers and financial experts worldwide. Islamic finance will grow with rapid pace in the year 2014 and its volume will pass through US $ 2 trillion where Islamic banking keeps 78%, Sukuk 16%, Takaful 1%, Islamic Funds 4% and Islamic Microfinance has 1% share in the Islamic Finance industry. These views were expressed by Islamic finance expert, Mr. Muhammad Zubair Mughal, CEO - Al-Huda Centre of Islamic Banking and Economics (CIBE) during an analysis on Islamic finance industry in the beginning of year 2014. He said that the Islamic finance industry growth will go on double digit in 2014 which will turn the US $ 1.6 trillion volume of Islamic finance industry in December 2013 to US $ 2 trillion by the end of 2014 including North African countries (Tunisia, Libya, Morocco, Senegal and Mauritania etc), rising trends of Islamic finance in Europe and UK, also the rising and substantial share of international market of Sukuk shall contribute to it (Zawya report, 2014). Despite the financial crisis which has plagued the economies of both industrialized and developing nations, the Islamic finance industry has been flourishing, and has enjoyed a 29 percent growth in assets to reach more than U.S.$ 600 billion in 2008 (Figure1).

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3 The report can be reached through the website http://www.zawya.com/story/2014_will_be_promising_for_Islamic_Finance_Industry-ZAWYA20131231113149/.
Some experts and officials of Islamic banks have even claimed that participating banks are either not or less affected by the global financial crisis than conventional peers due to the nature of participating banking in which all financial transactions must be trade-based and asset-linked (Hidayat and Abdullah, 2012). Financial stability is an essential tool for economic growth, as most transactions in the real economy are made through the financial system. Banking sector constitutes a major financial service sector affecting economic development. The stability and growth of any economy to a great extent depend largely on the stability of its banking sector. It functions as intermediary linking surplus and deficit units; facilitate funds for productive purpose and thereby contributes to economic development. Therefore, it is a need to focus on the relationship between Islamic banking and financial stability, as it was reported by leading market research agencies that Islamic banking was more resilient during the crisis and acted as a shock absorber. The present study tries to explore the importance of stability of Islamic banking before, during, and after the financial crisis that hit the world in 2008 in the context of Kingdom of Saudi Arabia.
The paper is organized as follows. Section one presents the current stage of Islamic banking and its definition. Section two shows the Islamic banking development in the Kingdom of Saudi Arabia. Section three illustrates the objectives and the importance of the study. The literature review on the relationship between Islamic banking and financial stability is included in section four. Section five explores the methodology of the study. Section 6 highlights the analysis and results of the study. Finally, section 7 gives the conclusions of the paper.

2. Islamic Banking in the Kingdom of Saudi Arabia

Kingdom of Saudi Arabia (KSA) is one of only a few fast-growing countries in the world with a relatively high per capita income of $24,200 in 2010 (Economy report, 2010). Saudi Arabia's command economy is mainly petroleum-based. Saudi Arabia is the second largest Islamic finance economy globally with assets worth $270 billion. The Kingdom also has the largest Islamic banking market with total assets of $217 billion (Saudi gazette report, 2013). Saudi Arabia strictly adheres to Islamic laws; therefore Islamic banking is not only exceptionally popular within the society but also has benefited from the authorities’ support since its inception.

The Saudi Arabian banking sector, that combines full-fledged Islamic banks and institution running both Shariah-compliant and conventional operations, recorded an asset growth of 27.3% during the first nine months of 2008 to reach at U.S $ 338.6 billion over the same period a year earlier. Combined bank deposits and total credit also grew at a healthy pace, of 19.1% to U.S $ 214.4 billion and 36.1% to U.S $ 266.6 billion respectively. Combined assets of full-fledged Islamic banks (Al-Rajhi, Al-Jazira, Al-Bilad and Al Inma bank) registered a CAGR of 22% during the period from 2003 till 2007, and accounted for 16.2% of total bank assets during 2007 (Blominvest report, 2009). Islamic banks posted strong results over the past few years in the Kingdom of Saudi Arabia (KSA). During the period from 1990 till 2010, combined assets of full-fledged Islamic banks in the kingdom of Saudi Arabia, generated an impressive growth from less than U.S $ 4,941 million in 1990 to more than U.S $ 70,839 million in 2010 with a cumulative growth up to 93.02 percent as shown in figure 2. The Saudi Arabian banking sector comprises 22 commercial banks, including 12 local banks and 10 branches of Gulf and foreign banks.
Out of the 12 local banks, four (Al-Rajhi, Al-Jazira, Al-Bilad and Al Inma Bank) are fullfledged Islamic banks. Al Rajhi is the third-largest Saudi bank, and the world's largest Islamic financial institution with total assets of U.S $ 33.3 billion recorded at the end of 2007.

The Remaining Saudi banks run both conventional and Shariah-compliant operations. Between 2003 and 2007, the assets of three full-fledged Islamic banks grew by 22%, faster than 18.6% recorded by total banking assets. Thus, the analyzed period turned out to be more beneficial for institutions focusing solely on Shariah-compliant operations than for those who tried to capture both Muslim and Non-Muslim markets. In 2006, the banking industry has experienced a slowdown as a result of the stock market crash in the country as shown in figure 3.
The Islamic banking industry’s size can be easily quantified as most Saudi banks separate their Shariah-compliant credit facilities and deposits from the conventional credit facilities. The only bank that does apply such differentiation is the Arab National Bank. On the loans and deposits front, Islamic banking is growing faster than the total banking industry, reflecting the regional trend and its early stage of development. During 2007, Islamic banks financing and investment activities have increased by 24.1%; while deposits rose by 30.6%. On the other hand, the total banking industry’s loans and deposits grew by 19.7% and 21.4%, respectively. Despite the healthy growth in total assets, loans and deposits, commercial banks registered a 12.7% drop in profits during 2007, on account of a plunge in brokerage and asset management fees (Blominvest report, 2009).

Total bank assets stood at 132.3% of GDP as compared to full-fledged Islamic bank assets penetration of 20.1% for 2007. Combined with the low penetration of the banking sector and expansion in overseas markets, Islamic banks in Saudi Arabia have a lot of growth potential.

The Islamic banking sector can benefit from the expansion into the market without having to compete for the customers with the conventional service providers. The product portfolio in the industry includes Murabaha, Ijara, Istisna, and Mudaraba.
During the period from 1990 till 2010, Islamic banks’ financing of all full-fledged-Islamic banks of the Kingdom of Saudi Arabia generated an impressive growth. It is clear from the figure 4 that the growth of Islamic banks’ financing increased from less than U.S. $ 4,149 million in 1990, to more than, U.S $ 43,716 million in 2010 with a cumulative increase up to 90.51 %.

![Islamic Banks' Financing in KSA (1990-2010)](image)

**Figure 4: Islamic Banks Financing (IBF) Growth in Kingdom of Saudi Arabia (1990-2010)**

Kingdom of Saudi Arabia, the second biggest population among the group of analyzed countries combined with low banking penetration and strong preference for Shariahcompliant services clearly presents an attractive growth opportunity for Islamic banks in the Middle East.

The industry is further helped by huge investment projects, initiated mainly by the state but with spillover effects for the private sector, of which a large part is still underway despite the financial crisis. Key players in the industry are expanding their presence in Kuwait, Malaysia, and Asia.
3. Research Problem, Objectives, and Importance

There is no doubt that Islamic financial sector development plays an important role in the overall development and stability of an economy. Although, there are many empirical studies that examined the relationship between banking sector and financial stability, but specific empirical studies on the relationship between Islamic banking and financial stability during the global financial crisis are not too many. So, this study tries to examine empirically the relationship between Islamic banking and financial stability in the Kingdom of Saudi Arabia before, during and after the 2008 global financial crisis and to achieve the following objectives.

- To compute and analyze some financial performance ratios of all Islamic banks in the Kingdom of Saudi Arabia with special reference to liquidity and capital adequacy ratios from 2005 to 2010.
- To understand the impact of global financial crisis on the financial performance of Islamic banks in the Kingdom of Saudi Arabia.

The importance of this study emanates from the fact that it addresses an important sector in the world economy and particularly in Middle East economies, namely the Islamic finance industry. It touches everyone in the society, and has a great effect on any economy positively or negatively. Muslims represent about a quarter of the world’s population, and there is greater awareness of and demand for Islamic-based financial products by Muslim and non-Muslim consumers.

4. Literature Review

Since, there is a strong relationship between stability and resilience of banking sector and economic safety, studies have been done to see which banking sector, conventional or Islamic, is more stable and robust. Siraj, k. and Pillai, P. (2012) in their research found that Islamic banks have done better than conventional banks in GCC region during 2005-2010.

They revealed that Islamic banks are more equity financed than conventional banks. The performance indicators of profitability, liquidity, and capital Adequacy were less affected by financial crisis in Islamic banks compared to conventional banks, as may be noted from the trends since 2007.
Abdulle and Kassim (2012) conducted a comparative analysis on the impact of the 2007-2008 global financial crisis on the Islamic and conventional banks in Malaysia. Three performance indicators, namely profitability, liquidity and credit risk of the banking institutions are being considered. The study covers a five-year period from 2006 to 2010, and divides the sample period into before, during, and after the financial crisis. The study revealed that Islamic banks were holding more of the liquid assets than their conventional counterparts, thus are less exposed to the liquidity risks due to the financial crisis.

Aktas, M. (2013) in his study examined, whether participating banking sector is more stable than conventional banking sector during the global economic crisis in Turkey. The study used trend analysis method for 2006-2011 on yearly basis. Profitability, liquidity, riskiness and asset quality ratios of conventional and participating banking sectors are utilized. Results of the study showed that participating banking sector is more stable than conventional banking sector in terms of profitability, capital adequacy and liquidity during the analysis period, which includes 2008 global economic crisis.

Sehrish, S. et al. (2012) in their study compared the financial performance of Islamic banking sector and conventional banking sector in Pakistan from year 2007-2011. They used six financial ratios including capital adequacy and profitability ratios. The results show that Islamic banks are less risky in terms of dealing in loans and less efficient in expense management as compared to the conventional banks in Pakistan.

Rafiuddin, A. and Alam, Z. (2012) in their study showed the comparative analysis of Islamic banks and conventional banks of the United Arab Emirates. They utilized average profitability, liquidity and risk ratios for Islamic and conventional banks for a limited period of 5 years, i.e., 2005-2009. Findings of their study show that the conventional banks are more profitable compared to the Islamic banks and Islamic banks have high liquidity and low risk in comparison to Conventional banks.

Also, it showed that Islamic banks registered a higher growth rate after the economic meltdown of 2008.
Kader and Asarpota (2007) applied financial ratios to three Islamic banks and five conventional banks in UAE for the time period 2000 to 2004 to get the glimpse of both the sectors’ performance. These financial ratios covered the profitability, liquidity, risk and solvency, and efficiency of banks. The results indicated that the Islamic banks of UAE were more profitable, more efficient, less liquid and less risky than conventional banks.

Samad and Hassan (2000) analyzed the performance in terms of profitability, liquidity, risk and solvency, and community involvement of a Malaysian bank, Bank Islamic Malaysia Berhad, for the period 1984-1997. The findings showed that the bank was a liquid and it was supposed not to have any liquidity issues. The study established that Bank Islamic Malaysia Berhad was comparatively less risky, less profitable and more solvent as compared to conventional banks.

Shafique et al., (2008) in a study have found that the recent global financial crisis has badly affected the conventional banking system everywhere in the world. Participation banking system has also been slightly affected by the global financial crisis but performance of participation banks during the global financial crisis is better than conventional banks. In addition, they state that risk in participation banks is less than conventional banks because of its interest free nature.

Parashar and Venkatesh (2010) conducted a study about the performance comparison of participating and conventional banking during the global economic crisis. They have used six ratios to analyze and compare the performance of participating banks and conventional banks. Their study shows that participating banks have suffered more than conventional banks during the recent global financial crisis in terms of capital ratio, leverage and return on average equity, while conventional banks have suffered more than participating banks in terms of return on average assets and liquidity. Over the four years period, i.e., 2006-2009, participating banks performed better than conventional banks.

Hidayat and Abdullah (2012) examined the impact of global financial crisis towards the financial performance of participating banking industry in Bahrain.

Moreover, it also utilized bank specific factors as predictors for participating bank performance in Bahrain. Panel regression model has been used to analyze the data. The results show that there is no significant impact of financial crisis upon the financial performance of participating banks during the global crisis.
5. Research Methodology and Data

The qualitative and quantitative methods have been used. Data is collected from balance sheet, income statements and cash flow statements published by all full-fledged-Islamic Banks in the Kingdom of Saudi Arabia. Islamic Banks and Financial Institutions Information (IBIS) database for all Islamic banks working in the KSA is used. To serve the purpose of the study, some appropriate financial ratios are calculated based on average for the period of 2005 to 2010. The ratio analysis is widely adopted by many studies to evaluate the banks’ performances (see, for example, O’Connor, 1973; Libby, 1975; Chen and Shimerda 1981; Ross, 1991; Spindler, 1991; Sabi, 1996; Hempel and Simonson, 1998). Among the most important advantage of ratio method is that it removes the disparities between banks as they are not equal in size (Samad, 2004). The six year period has been divided into three parts before crisis, during crisis, and after crisis. Although it is difficult to say, what is the exact time period for the start of crisis, as it varies in different parts of the world. Based on the previous studies, the data has been divided into three time periods 2005-2006 before the crisis, 2007-2008 during the crisis, and 2009-2010 after the crisis. For the analysis, firstly, Microsoft Excel has been utilized for financial ratios calculations and charting. Secondly, SPSS software has been used to focus on hypothesis testing to assess the impact of global financial crisis on the performance ratios of Islamic banks. The related samples have been tested by One Way Analysis of Variance (ANOVA). The financial ratios are classified in to two categories, i.e., liquidity and capital adequacy ratios.

5.1 Liquidity Ratios

Liquidity means how quickly a bank can convert its assets into cash at face value to meet the cash demands of the depositors and borrowers. Two important ratios are applied which are used as below:

- Investments Assets Ratio (IAR) : \((\text{Total Investments} / \text{Total Assets}) * 100\). This liquidity ratio indicates what percentages of the assets of the bank are tied up in loans.

The higher this ratio is the less liquidity of the bank.
Liquid Assets Ratio (LAR) : ((Cash and Its Equivalents + Investments in Bonds, Bills, and Securities) / Total Assets) *100. This is a deposit run off ratio and looks at what percentage of customer and short term funds could be met if they were withdrawn suddenly, the higher this percentage, the more liquid the bank is and less vulnerable to a classic run on the bank.

5.2 Capital Adequacy Ratios

Capital adequacy ratios test the bank’s capacity to meet the time liabilities and other risks such as credit risk, operational risk. It is used as a measure of strength and stability of the financial systems around the world. To measure the credit/loan risk performance of the banks, the following two financial ratios are used.

- Equity Total Assets Ratio (EQTAR) - (Total Share Holders' Equity / Total Assets) * 100. As Equity is a cushion against asset malfunction, this ratio measures the amount of protection afforded to the bank. The higher this figure the more is the protection.
- Equity / Liabilities (ELR): (Total Shareholders' Equity / Total Liabilities) * 100. This leverage ratio measures how the assets are financed with debt or with equity.

6. Results and Discussion

6.1 Liquidity Ratios Analysis

- Investment Asset Ratios (IAR)

Table (1) shows average results of Investment Asset Ratio of all full-fledged Islamic banks in the kingdom of Saudi Arabia from 2005 to 2010. This measure shows the percentage of assets that are tied up in loans and the lower the ratio; the more liquid is the bank.

From the analysis of figure (5), it is quite clear that the liquidity of the Islamic banks is improving through the time especially from 2005. Islamic banks have achieved a lower (IAR) ratio in 2009 with 46.11%.
Table 1: Average Investment Asset Ratio in the Kingdom of Saudi Arabia (2006-2010)

<table>
<thead>
<tr>
<th>Years</th>
<th>Average Investment Asset Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>74.97</td>
</tr>
<tr>
<td>2006</td>
<td>73.60</td>
</tr>
<tr>
<td>2007</td>
<td>62.14</td>
</tr>
<tr>
<td>2008</td>
<td>74.67</td>
</tr>
<tr>
<td>2009</td>
<td>46.11</td>
</tr>
<tr>
<td>2010</td>
<td>66.63</td>
</tr>
</tbody>
</table>

Figure 5: Investment Asset Ratio in the Kingdom of Saudi Arabia

The IAR has suddenly increased from 2007 to 2008 due to uncertainty of financial markets at that time. After that, it comes to normal status from 2008 to 2009. This is consistent with prior studies that showed Islamic banking sector is more liquid sector (Aktas, M. (2013), Rafiuddin and Alam, Z. (2012), and Samad & Hassan (2000).
Testing of Hypothesis

A One way ANOVA is used to test the following hypothesis as shown in table (2).

**H0**: There is no significant difference before, during, and after global financial crisis in Investment Asset Ratio (IAR) of Islamic banks in the Kingdom of Saudi Arabia.

**H1**: There is a significant difference before, during, and after global financial crisis in Investment Asset Ratio (IAR) of Islamic banks in the Kingdom of Saudi Arabia.

**Table 2: One Way ANOVA (IAR)**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>621.175</td>
<td>310.688</td>
<td>7.026</td>
<td>0.074</td>
</tr>
<tr>
<td>Within Groups</td>
<td>132.621</td>
<td>44.207</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>753.796</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The p value is 0.074 for the Kingdom of Saudi Arabia. This value is more than $\alpha$ (0.05) level of significance which results in accepting null hypothesis, meaning thereby that there is no significant difference in (IAR) before, during, and after the global financial crisis. This result indicates that Islamic banks have been isolated from the financial crisis which emphasizes on the stability of Islamic banks. This result is also consistent with prior studies like Abdulle and Kassim (2012), Aktas, M. (2013), and Parashar & Venkatesh (2010).

Liquid Assets Ratio (LAR)

Table (3) shows average results of Liquid Asset Ratio of all Islamic banks in the Kingdom of Saudi Arabia from 2006-2010. Islamic banks have achieved a high (LAR) ratio of 33.96% in 2007. It is clear from figure (6) that the liquidity of the Islamic banks for the Kingdom of Saudi Arabia has increased from 2006 to 2007.
After that, the ratio has been affected especially in 2008, due to the uncertain situation of financial markets but this effect is minor compared to that of conventional banks. It is clear from the figure that the (IAR) ratio is improving from 2008 to 2009. This indicates that Islamic banks have a higher run off ratio from the occurrence of global financial crisis in 2008. This indicates that the Islamic banks were holding a higher percentage of deposits and short term funds to meet any sudden withdrawals.

Table 3: Average Liquid Asset Ratio in KSA (2006-2010)

<table>
<thead>
<tr>
<th>Years</th>
<th>Average Liquid Asset Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>22.46</td>
</tr>
<tr>
<td>2006</td>
<td>21.86</td>
</tr>
<tr>
<td>2007</td>
<td>33.96</td>
</tr>
<tr>
<td>2008</td>
<td>26.03</td>
</tr>
<tr>
<td>2009</td>
<td>31.68</td>
</tr>
<tr>
<td>2010</td>
<td>22.68</td>
</tr>
</tbody>
</table>

Figure 6: Liquid Asset Ratio in KSA
Testing of Hypothesis

One way ANOVA has been used, as shown in table 4. The following hypothesis has been tested:

**H₀**: There is no significant difference before, during, and after global financial crisis in Liquid Asset Ratio of Islamic banks in the Kingdom of Saudi Arabia.

**H₁**: There is a significant difference before, during and after global financial crisis in Liquid Asset Ratio of Islamic banks in the Kingdom of Saudi Arabia.

**Table 4: One Way ANOVA (LAR)**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>96.842</td>
<td>48.421</td>
<td>3.004</td>
<td>0.192</td>
</tr>
<tr>
<td>Within Groups</td>
<td>48.363</td>
<td>16.121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>145.205</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The p value is 0.192 which is more than α (0.05) level of significance, resulting in the acceptance of null hypothesis. It is obvious from the table that there is no significant difference in (LAR) before, during, and after the global financial crisis. This result indicates that Islamic banks are not affected by global financial crisis. This also implies that the Islamic banks were holding more liquid assets than that of conventional banks, and are less exposed to liquidity risk.

6.2 Capital Adequacy Ratios

Equity Total Assets Ratio (EQTAR)

Table (5) shows average results of Equity Total Assets Ratio of all Islamic banks in the Kingdom of Saudi Arabia from 2006-2010. From the figure (7), it is quite clear that the (EQTAR) of the Islamic banks is in the same range during the study period which includes 2008 global financial crisis. This means that Islamic banks in the Kingdom of Saudi Arabia have been protected from the financial crisis.
It can be seen from the figure (7) that Islamic banks have achieved a high (EQTAR) ratio of 26.43% in 2010. It also shows that Islamic banks are enjoying high (EQTAR) throughout the time period of this study, which means that Islamic banks have quite a large capacity of absorbing loan losses. This is consistent with prior studies which found that Islamic banking sector is more equity financed than conventional banks like Siraj, K. and Pillai, P. (2012), Sehrish, S. et al. (2012), kader and Asapota (2006).

Table 5: Average Equity Total Assets Ratio (2006-2010) in KSA

<table>
<thead>
<tr>
<th>Years</th>
<th>Average Equity Total Assets Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>24.69</td>
</tr>
<tr>
<td>2006</td>
<td>21.12</td>
</tr>
<tr>
<td>2007</td>
<td>19.46</td>
</tr>
<tr>
<td>2008</td>
<td>20.12</td>
</tr>
<tr>
<td>2009</td>
<td>24.80</td>
</tr>
<tr>
<td>2010</td>
<td>26.43</td>
</tr>
</tbody>
</table>

Figure 7: Equity Total Assets Ratio in KSA
Testing of Hypothesis

One way ANOVA has been applied, as shown in table 6. The following hypothesis has been tested:

\[ H_0: \text{There is no significant difference before, during, and after global financial crisis in Equity Total Assets Ratio of Islamic banks in the Kingdom of Saudi Arabia.} \]

\[ H_1: \text{There is a significant difference before, during, and after global financial crisis in Equity Total Assets Ratio of Islamic banks in the Kingdom of Saudi Arabia.} \]

Table 6: One Way ANOVA (EQTAR)

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>28.672</td>
<td>14.286</td>
<td>6.657</td>
<td>0.079</td>
</tr>
<tr>
<td>Within Groups</td>
<td>6.437</td>
<td>2.146</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>35.109</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The p value is 0.079 and it is more than \( \alpha (0.1) \) level of significance, which results in accepting null hypothesis. It may be inferred from the analysis that there is no significant relationship and difference in (EQTAR) before, during, and after the global financial crises. This result indicates that Islamic banks have been protected from the crisis, which goes on to show the stability of Islamic banks. Also, it implies that Islamic banks depend largely on the equity capital, and equity financing works as a cushion against asset malfunction.

Equity / Liabilities (ELR) Table (7) shows average results of Equity Liabilities Ratio of all Islamic banks in the Kingdom of Saudi Arabia from 2006-2010. From figure (8), it is evident that the (ELR) of the Islamic banks is also stable during 2007-2008. It registered a high value 40.12 in 2009. A bank with higher ELR is considered to be better compared to the bank with lower ELR. This means that Islamic banks have quite a large capacity to absorb the financial shocks.
Table 7: Average Equity Liabilities Ratio (2006-2010) in KSA

<table>
<thead>
<tr>
<th>Years</th>
<th>Average Equity Liabilities Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>36.71</td>
</tr>
<tr>
<td>2006</td>
<td>31.84</td>
</tr>
<tr>
<td>2007</td>
<td>24.26</td>
</tr>
<tr>
<td>2008</td>
<td>26.11</td>
</tr>
<tr>
<td>2009</td>
<td>40.12</td>
</tr>
<tr>
<td>2010</td>
<td>38.12</td>
</tr>
</tbody>
</table>

Figure 8: Equity Liabilities Ratio in KSA

Testing of Hypothesis

The following hypothesis has been tested as shown in table (8):

\( H_0: \) There is no significant difference before, during and after global financial crisis in Equity Total Liabilities Ratio of Islamic banks in the Kingdom of Saudi Arabia.
**H1:** There is a significant difference before, during and after global financial crisis in Equity Total Liabilities Ratio of Islamic banks in the Kingdom of Saudi Arabia.

**Table 8: One Way ANOVA (ELR)**

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>215.874</td>
<td>107.937</td>
<td>22.772</td>
</tr>
<tr>
<td>Within Groups</td>
<td>14.220</td>
<td>4.740</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>230.094</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results obtained from table (8) indicate that the p value is 0.021 and it is more than α (1%) level of significance, which would mean that null hypothesis is accepted. This indicates that Islamic banks have remained unaffected during the global financial crisis. It also indicates that Islamic banks’ ability to absorb financial losses and to deal with the nonperforming/ impaired loans is higher than other banks. The findings depict that Islamic banks are less risky than conventional banks in the Kingdom of Saudi Arabia. These results are consistent with those of Samad and Hassan (2000), Shafique et al. (2008) and Abdulleand Kassim (2012), Aktas, M. (2013).

**7. Conclusions**

In this paper, we have explained the performance and stability of Islamic banking in the Kingdom of Saudi Arabia. The impact of recent financial crisis beginning 2008 onwards in the liquidity and capital adequacy of all full-fledged Islamic banks in the Kingdom of Saudi Arabia has been examined. The study covers six years from 2005 to 2010. The performance indicators studied include liquidity ratios and capital adequacy ratios. The results indicate that Islamic banks are holding more liquid assets and are less exposed to liquidity risk. The higher liquidity ratio of Islamic banks compared to that of conventional banks could be due to limitation of scope of the Islamic banking investment. The Analysis of Variance (ANOVA) results indicate that there is no significant difference before, during, and after global financial crisis on the liquidity ratios of Islamic banks. This indicates that the Islamic banks were holding a higher percentage of deposits and short-term funds to meet any sudden withdrawals.
Furthermore, it has been inferred from the results of the study that capital adequacy ratios are stable through the study period. Total equity ratios registered a higher proportion in total assets of Islamic banks. This implies that Islamic banks have quite a large capacity of absorbing loan losses. This result supports the view that Islamic banks are more equity financed and are depending on profit and loss sharing relationship rather than debt-credit relationship unlike that of conventional banks. Further, the results of equity liabilities ratio show that Islamic banking is enjoying high (ELR) during the study period. This means that Islamic banks have quite a large capacity to absorb the financial shocks. The results of (ANOVA) indicate that there is no significant difference before, during, and after global financial crisis in the capital adequacy ratios of Islamic banks. This implies that the Islamic banking sector has performed well during the financial crisis, by virtue of its distinctive principles and asset backed financing.

References


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