

Evaluation of Jordanian Islamic Banks Compliance with the Requirements of Basel III

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Abstract

This study is descriptive and analytical based on the published financial reports of Islamic banks from 2011-2016. It aims to evaluate three Jordanian Islamic banks compliance with the impact of Basel III requirement. We use the data of annual reports for banks to calculate financial ratios (Leverage, liquidity, coverage ratios and capital adequacy ratio (CAR)) to analyses the impact of Basel III on Islamic banking performance. The results show that on an average basis all Islamic banks have CAR ratios between 27% to 31%, which indicates that all Islamic banks in Jordan have a good CAR ratio and above the requirement of the central bank of Jordan (12%). In addition they meet the requirements of (IFSB). In respect of leverage and liquidity ratios results indicate that profitability of Islamic banks associated with higher levels of debt. About liquidity coverage ratio we found that it affects Islamic banks efficiency negatively.

Keywords: Islamic Banking, Basel III, CAR, IFSB

I. Introduction

The banking sector in Jordan plays a vital role in economic development and represents the kingdom's second – largest contributor to GDP growth. There are 22 local, regional and international banks operating in Jordan in addition to four foreign and national Islamic banks which compete with conventional banks in order to increase their market share. Despite the fact that the unique nature of Islamic banking requires special standards such as those set by the Accounting Organization for Islamic Financial Institutions (AAOIFI) established in 1990, for Shari'ah accounting and the Islamic Financial Service Board (IFSB) which was established in 2002 for supervisory standards, the Central Bank of Jordan requires that these Islamic banks fully apply the requirements of Basel accords III as it was the case with Basel I & II. *Basel III* is the last of the banking regulation agreements proposed in 2010 and that should be implemented from January 1, 2013 until January 1, 2019. This agreement has been devised to avoid a repetition of the subprime crisis that led to the 2007 financial crisis (Silva and Fernandes, 2014). Basel III aims at strengthening bank's capital and liquidity ratios in order to mitigate the potential risks. Compliance with these international accords has become very important especially in today's economic conditions and many Islamic banks including Jordanian, began to incorporate these requirements into their operations. Banks in Jordan, especially the Islamic ones are very concerned about complying with these international standards because they are aware that Basel III is a tool for hedging future crises; protect banks from exposing to financial risks. On the other hand it is a financial burden that will affect their profitability and it will be difficult for them to attract new investors.

II. Statement of the Problem

Although the impact of Basel III will vary from one country to another, the new requirements will hinder the growth of Islamic banks operating in Jordan if they do not address the new capital requirements and they will find themselves short with ratios of Basel III and could see corresponding declines in return on equity (ROE). The results showed that despite the fact that Basel III accords were scheduled to be introduced from 2013 until 2015; however, changes from 2013 extended implementation until 2019 as presented in Table 2.

III. Literature Review

In order to answer our question about the extent of applying Basel III, previous literature have been reviewed in the following manner; (Hasan, 2014) concluded that Basel accords need not make any special difficulty for implementation in the Islamic section of global finance since Islamic banking has an in-built protection against the risk. Another research for Bitar (2013) tried to investigate the effectiveness of banking regulation imposed by base III through analyze and compare the impact of liquidity, capital and leverage requirements on the stability of the banking sector found that capital risk relationship is different between Islamic and conventional banks. Results about liquidity shows that Islamic banks with higher liquid assets to deposits have higher return on assets and higher net interest margin in comparison with conventional bank. On the other hand (Harzi, 2009) came to prove Hasan results but on conditions that Islamic banks cannot implement Basel III without adjustment according to their specificities, to get benefit from a positive impact in terms of competitiveness.

Rizwan and khan (2012) and Saleem (2017) investigate that Islamic banks meet the Basel Capital requirements and the financial performance of GCC Islamic banks is highly sensitive to the launch of Basel III regulations. For the risk side, Boumediene (2011) provide evidence that Basel III is a suitable way to deal with risks for conventional banks but not applicable to Islamic Banking. On the other side Azeem, Marsab and Ozari (2015) found in their paper that Basel III has failed to construct difference between Islamic and conventional banks, but in term of leverage and liquidity, ratio conventional banks were more effective than Islamic.

Kennedy (2012) considers Basel III as a chance for Islamic banks over conventional banks to have stronger and well-managed competitive positions. Spinassou and wardhana (2017) confirmed the same result of Kennedy; they show that Islamic banks performance under Basel III capital requirements benefit from a less competitive environment than conventional banks, because of their higher abilities to absorb losses.

Bitar and pukthuanthong (2014) and Madies (2014) found that capital and liquidity ratios negatively affect the efficiency of Islamic banks relative to conventional banks. On the other hand there was a positive relationship between leverage and the efficiency of Islamic banks, Madies add up to in his study that higher capital and liquidity positions occasioned with better efficiency for conventional than Islamic banks during the crisis. On the contrary Bouyahiaqui and Quendi (2018) affirm that many Islamic banks were, and still, affected negatively by the Basel III (viewed mainly on the liquidity ratio, in comparison with the capital ratio) but in some countries, as in Malaysia and Pakistan, positive impacts were observed, and that because of the application of the Basel III sharia-compliant by Malaysian and Pakistani central banks. Karim and Ali (1989) results show that GCC Islamic banks are more profitable than other GCC banks. Alam (2012) study came to proof a negative relationship between liquidity and inefficiency in Islamic bank, but he gives an advantage to Islamic banks because they could be more adjustable to regulatory necessities than conventional banks. Through global financial crises Parashar and Venkatesh (2010) make a comparison between Islamic and conventional banks performance ,and they found that Islamic banks have did better than conventional banks.

IV. Objective of the Study

The aim of this research is to investigate the compliance of Islamic banks operating in Jordan with the requirements of Basel III in terms of capital adequacy ratios, liquidity ratios, and coverage ratios during the period 2010-2016. The objective of this study can be achieved by answering the following hypothesis in the null form:

H01: Jordanian Islamic banks are not ready to apply the requirements of Basel III in terms of capital adequacy ratio

H02: Jordanian Islamic banks are not ready to apply the requirements of Basel III in terms of liquidity standards.

H03: Jordanian Islamic Banks are not ready to apply the requirements of Basel III in terms of leverage ratio.

H04: Jordanian Islamic Banks are not ready to apply the requirements of Basel III in terms of coverage ratio.

V. Methodology

This study is descriptive and analytical based on the published financial reports of three Islamic banks in Jordan from 2011-2016 (Jordan Islamic Bank, Islamic International Arab Bank and Jordan Dubai Islamic Bank). This study covers all national Islamic banks of Jordan as presented hereunder:

Table 1 Islamic Banks’ profile in Jordan

| No. | Banks | Establishment | Branches | Assets | Equity |
|-----|-------|---------------|----------|---------|--------|
| 1 | JIB | 1978 | 62 | 4.503.4 | 343.1 |
| 2 | IIAB | 1998 | 42 | 1.969.8 | 155.8 |
| 3 | JDIB | 2010 | 22 | 919.6 | 132.4 |

This study based on survey of the requirements of Basel III from the regulatory framework implemented or not by Islamic banks point of view. To achieve our research objectives we depend on the annual financial reports for Islamic banks used to calculate financial ratios to test the compliance of Jordanians Islamic banks compliance with Basel III, also we used additional sources of data; review of articles and related previous studies.

Basel III Accords

Basel III is the third regulatory framework which was agreed upon by Basel Committee on Banking Supervision in 2010, to be gradually implemented over the period (2013- 2019). This accord was designed to minimize the deficiencies of Basel II revealed by the late financial crisis of 2007-2008. Basel III is intended to strengthen bank capital requirements by increasing bank liquidity and decreasing bank leverage (<https://www.revolvy.com>). Accords can be summarized as follows:

Capital requirements

Banks are required to maintain a minimum Common Equity Tier 1 ratio of 4.5 % (up from 2% in Basel II). This ratio is calculated as follows: $\frac{CET1}{RWAs} \geq 4.5\%$ (From 1January 2015). The minimum Tier 1 capital has been raised from 4% to 6%. This ratio includes 4.5% of CET1 and 1.5% Additional Tier 1 (AT1). Capital conservation buffer of risk weighted assets has been gradually introduced over the period 2016-2019 to reach 2.5%. Taking into consideration the 4.5%, banks are obliged to hold 7% CET1capital ratio (effective from 2019) .Counter-cyclical buffer from 0 to 2.5% of risk weighted assets must be met by CET1capital.

Islamic banks shall comply with the minimum capital adequacy ratios (Tier 1 and Tier 2) equal to 12.5% according to Basel III standards.

1. Leverage ratio requirements

Under Basel III, banks have to maintain a leverage ratio of 3%. This ratio is calculated as follows: $\frac{\text{Tier 1 Capital}}{\text{Total exposure}} \geq 3\%$.

It is calibrated to act as a credible additional measure to other risk-based capital measures. This ratio illustrates how many times banks succeed in multiplying their invested capital by attracting resources (Toumi et al., 2011).

2. Liquidity Coverage Ratio According to this ratio, banks is expected to hold sufficient liquid assets to meet its cash outflows over 30 days. This ratio is calculated

as follows: $\text{LCR} = \frac{\text{High quality liquid assets}}{\text{Total net liquidity outflows over 30 days}} = 100\%$

Liquidity coverage ratio aims to ensure that a bank has an adequate stock of unencumbered HQLA that consists of cash or assets that can be converted into cash at little or no loss of value in private markets, to meet its liquidity needs for a 30-calendar day liquidity stress scenario (Bank for international settlements, 2013)

The Basel Committee of Banking Supervision (“BCBS”) issued the LR framework together with the associated disclosure requirements in January 2014. Under the BCBS transitional arrangement for Basel III implementation, banks are required to report their LR to regulators for supervisory monitoring based on a 3% “testing minimum” from 2013 until 1 January 2018 (“HKMA”, 2017).

The following table reviews Basel III accord timeline as reported in Union Arab Banks:

Table 2 Basel III phases – in arrangements. (All dates are as of 1 January)

| Phases | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|--|------|------|-------------------------|-------|-------|-----------------------|------|
| Leverage ratio | | | Disclosure starts 2015 | | | Migration to Pillar 1 | |
| Minimum Common Equity Capital ratio | 3.5% | 4.0% | | | 4.5% | | 4.5% |
| Capital Conservation Buffer | | | | 0.625 | 1.25% | 1.875% | 2.5% |
| Minimum common equity plus capital conservation buffer | 3.5% | 4.0% | 4.5% | 5.125 | 5.75% | 6.375% | 7.0% |
| Phase- in of deductions from CET1* | | 20% | 40% | 60% | 80% | 100% | 100% |
| Minimum Tier 1 capital | 4.5% | 5.5% | | | 6.0% | | 6.0% |
| Minimum Total Capita | | | 8.0% | | | | 8.0% |
| Minimum Total Capital Plus conservation Buffer | 8% | 8% | | 8.625 | 9.25 | 9.875 | 10.5 |
| Capital instruments that no longer qualify as non- core Tier 1 capital or Tier 2 | | | Phased out over 10 year | | | | |

| | | | | | | | |
|--------------------------|--|--|------------------------------|-----|-----|-----|------|
| capital | | | horizon beginning 2013 | | | | |
| Liquidity coverage ratio | | | 60% | 70% | 89% | 90% | 100% |

*Source: Union of Arab Banks, Basel III, 2010, p, 9.

Table 2: Descriptive data for all Jordanian Islamic banks

| | Capital Adequacy Ratio | Liquidity Ratio | Leverage Ratio | Coverage Ratio |
|---------------------------------|------------------------|-----------------|----------------|----------------|
| Jordan Islamic Bank | 22.6% | 144.6% | 13.4% | 72.2% |
| Islamic International Arab Bank | 16.2% | 147.5% | 13.2% | 78.2% |
| Jordan Dubai Islamic Bank | 44.8% | 148.2% | 13.6% | 84.9% |

Table 3. CAR: Regulatory Capital to Risk Weighted Assets

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|------|--------|--------|--------|--------|--------|--------|--------|
| JIB | 14.42% | 21.57% | 24.48% | 19.56 | 20.95% | 21.11% | 22.02% |
| IIAB | 24.6% | 22.8% | 25.19% | 17.98% | 17.91% | 17.59% | 16.21% |
| JDIB | 79.85% | 50.76% | 43.32% | 44.78% | 44.31% | 47.23% | 44.8% |

Source: Annual reports of respected banks for the years 2010-2016

Table 3 shows the capital adequacy ratios (CAR) for all Islamic Jordanian banks, results indicate good CAR ratios for all banks, since they are above the requirements of the central bank of Jordan (12%).

Table.4. Liquidity Ratios.

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|------|-------|-------|-------|-------|-------|-------|-------|
| JIB | 157.4 | 151.6 | 144.8 | 153.3 | 154.1 | 152.0 | 144.6 |
| IIAB | 159.1 | 151.4 | 142.3 | 149.9 | 153.2 | 152.7 | 147.5 |
| JDIB | 164.4 | 150.6 | 144.1 | 151.7 | 150.3 | 148.2 | 148.2 |

Source: Authors' compilation based on annual Financial Statements of respected banks during the period 2010-2016.

With regard to liquidity ratios, we can conclude that all Jordanian Islamic banks have high liquidity and are able to meet short and long-term obligations, as presented in table 4.

Table.5. Coverage Ratios

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|------|--------|--------|--------|--------|--------|--------|--------|
| JIB | 47.88% | 53.44% | 57.93% | 63.56% | 69.80% | 72.08% | 72.24% |
| IIAB | 52.33% | 69.44% | 71.33% | 74.11% | 78.15% | 78.63% | 78.92% |
| JDIB | 33.24% | 16.30% | 48.86% | 58.02% | 60.96% | 84.69 | 84.98% |

Source: Annual reports of respected banks for the years 2010-2016

If we look at table 5 which shows coverage ratios in Jordanian Islamic banks we can conclude that these banks doesn't meet the requirements liquidity coverage ratio, which means in case of credit default they will lose some profits.

Table. 5. Leverage Ratios

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|------|-------|-------|-------|-------|-------|-------|-------|
| JIB | 12.6% | 12.8% | 13.1% | 12.7% | 12.9% | 13.4% | 13.1% |
| IIAB | 12.8 | 13.2% | 13.6% | 13.2% | 13.4% | 13.4% | 13.6% |
| JDIB | 13.5% | 13.8% | 12.9% | 13.1% | 13.3% | 13.6% | 13.2% |

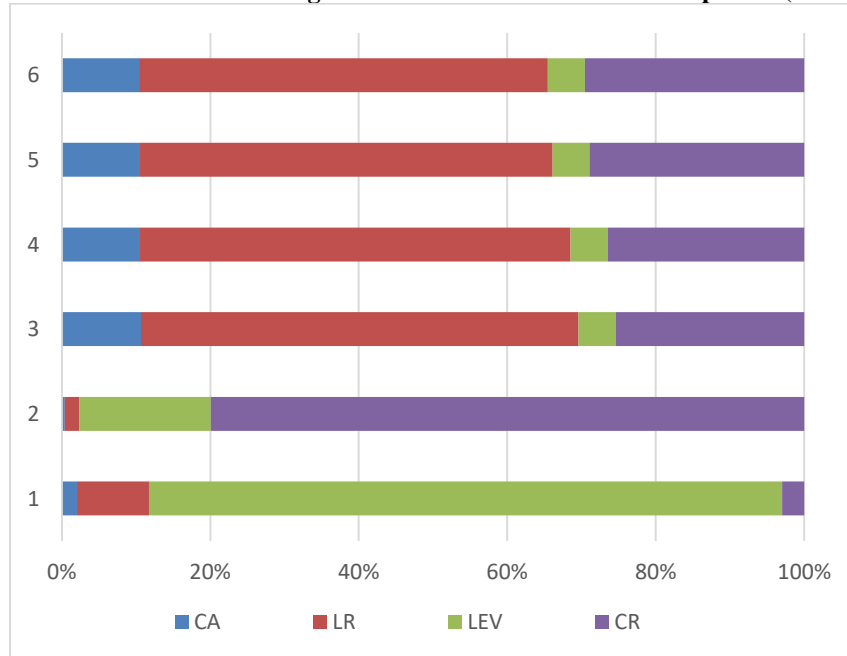
Source: Annual reports of respected banks for the years 2011-2016

According to Jordanian Islamic banks leverage ratios as results exhibited in table 5, we can say they all meet the requirements and have a good leverage ratio above the standards.

Table.6 Average ratios calculated on Islamic banks for the period 2011- 2016

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|------------------------|--------|--------|--------|--------|--------|--------|
| Capital adequacy ratio | 39.6% | 31.71% | 31% | 27.72% | 28.64% | 27.67% |
| Liquidity Ratio | 160.3% | 151.2% | 142.7% | 151.6% | 152.5% | 150.9% |
| Leverage Ratio | 12.9% | 13.3% | 13.2% | 13.0% | 13.2% | 13.5% |
| Coverage Ratio | 44.5% | 46.4% | 59.2% | 65.2% | 69.6% | 78.5%. |

Chart 1 Combined Average ratios for Islamic Banks for the period (2011-2016)



Source: Authors' compilation based on the above tables.

VI. Conclusion

This research attempt to evaluate Jordanian Islamic banks compliance with requirements of Basel III. The hypothesis was tested using published financial reports for banks during the period 2011-2016.

The results show that Jordanian Islamic banks apply the requirements of Basel III in term of capital adequacy , liquidity and leverage ratios. Except coverage ratio. We found these banks do not match the requirements of Basel III. This will affect the stability of the banks. So Islamic banks must increase their coverage ratio to improve flexibility in ' short-term liquidity risk profile. High-quality liquid assets can quickly and simply be converted into cash to face any liquidity requirements might occur and to better protect the banking industry from possible economic crises.

We conclude that Islamic banks in Jordan are characterized with good degree of stability that has because Leverage ratio requirement into the Basel III regulatory structure will lead to more stable banks and increasing loss-absorbing capacity, this result consist with Madies (2014) results.

Our results also shows that Islamic banks in Jordan have a high liquidity ratios which means they have the ability to pay debt obligations and safety coverage of short-term debt in emergency. In addition, Jordanian Islamic banks with a good capital adequacy ratio seems to be safe and likely to meet their financial obligations and less likely to become insolvent if unexpected losses arise.

In general we can conduct that Jordanian Islamic banks compliance with Basel III requirements with some adjustments concerning to coverage ratio. In addition, our results consist with Rizwan and khan (2012) , Saleem (2017) and Kennedy (2012) results.

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