Impact of Liquidity Risk on the Profitability of Jordanian Islamic Banks

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Abstract

The study aimed to identify the ratio of liquidity on the return on assets and the return on equity, and to identify the impact of the liquidity ratio to total deposits, the legal liquidity ratio to the return on assets on one hand and the return on equity of the Jordanian Islamic banks on the other hand depending on the bank's size and the rate of indebtedness. The two researchers used the descriptive analytical approach relying on quantitative data extracted from the annual reports and final accounting statements of two Jordanian Islamic banks namely Jordan Islamic Bank and the Islamic International Arab Bank during the period (2008 – 2014). The researchers produced several results, most importantly: There is statistically significant impact of liquidity risk (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on assets (ROA) and the return on equity (ROE) on one hand and in the Jordanian Islamic banks on the other hand. There is statistically significant impact of the liquidity risks jointly (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on one hand on ROA and ROE of the Jordanian Islamic banks depending on the bank's size on the other hand. The study recommends the following: The Jordanian Islamic banks should not over preserve liquidity and should look for tools to employ the excess liquidity keeping a suitable and balanced combination of assets and obligations in addition to a clear and flexible plan to be able to deal with any urgent liquidity crisis, depending on diverse sources and employment of funds in terms of different sectors and terms, and depending on short – term employment. The bank should also put acceptable limits to liquidity risks according to its acceptable total risk volume.

Introduction

Liquidity risks clarify the relationship between the bank's demand for liquidity to meet the withdrawals of depositors and to seize opportunities to grant funding to clients. In order to treat liquidity shortage as a precaution measure, banks invest in short – term stocks in conformity with the Islamic Sharia provisions (less than 3 months) for the purpose of realizing two advantages: The first is the easy liquefaction when necessary and the second is to achieve profits and returns through investing in those stocks. Moreover, banks formed a special committee to manage the assets and demands that care for liquidity management. Basel committee paid attention to this subject and issued a special document in this regard. To guarantee that the bank maintains adequate liquidity that guarantees the soundness of its financial status, it must consider the following:
-   Keeping sufficient amounts of cash and quasi – cash balances.
-   Preparing future harmonization policy for cash flows.
-   Distributing fund employment in a way that comports with public deposits.

Research Problem

The problem of this research lies in answering the following questions:
1.   What is the impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on assets (ROA) of the Jordanian Islamic banks?
2.   What is the impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on equity (ROE) of the Jordanian Islamic banks?
3.   What is the impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on assets (ROA) of the Jordanian Islamic banks adopting the bank's size?
4.   What is the impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on equity (ROE) of the Jordanian Islamic banks adopting the bank's size?

Research Objectives

Islamic banks, the same as traditional ones, depend on the international standards recommended by Basel Committee's Conventions which were adapted by the Accounting and Auditing Organization for Islamic Financial Institutions and the Islamic Financial Services Board to identify the impact of their application on the profitability of those banks.

The research objectives can be summarized in the following:
1. Identifying the impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on assets of the Jordanian Islamic banks.
2. Identifying the impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on equity of the Jordanian Islamic banks.
3. Identifying the impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on assets of the Jordanian Islamic banks adopting the bank size.
4. Identifying the impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on equity of the Jordanian Islamic banks adopting the bank size.

Research Importance
This research derives its importance from the significance of the financial performance and profitability of the Jordanian Islamic banks being the basis which banks seek to realize. Since banks are the core of the Jordanian public shareholding companies in the financial sector, and if the two researchers were able to produce appropriate results and recommendations, they would be able to contribute in supporting the capability of those banks to international competition which will positively reflect on the Jordanian economy.

Methodology
The two researchers sought to achieve the objectives of the study through the following:
1. Theoretical research by viewing the suitable references related to the subject of the study.
2. Quantitative data extracted from the final accounting reports and statements of two Jordanian Islamic banks which are Jordan Islamic Bank and the Islamic International Arab Bank.
3. Using the descriptive and analytical approach.

Hypotheses
First hypothesis: There is no statistically significant impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on assets of the Jordanian Islamic banks.
Second hypothesis: There is no statistically significant impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the returns on equity of the Jordanian Islamic banks.
Third hypothesis: There is no statistically significant impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on assets of the Jordanian Islamic banks adopting the bank's size.
Fourth hypothesis: There is no statistically significant impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the returns on equity of the Jordanian Islamic banks adopting the bank's size.

Literature Review
1. The study of Abdullah, Ahmad Sufian (2015), "Liquidity Management at the Islamic Banks in Malaysia: Analytical study from Islamic Perspective". PhD thesis in economy and Islamic banks, Faculty of Sharia and Islamic studies in Yarmouk University.
The objectives of the thesis touched upon the concept of the Islamic and traditional banks liquidity in terms of management and challenges, as well as studying the financial tools used to manage liquidity in the Malaysian Islamic banks. The thesis also sought to establish special standards that consider Sharia provisions and tools used in liquidity management in Islamic banks. The thesis revealed that Islamic banks face greater challenges in liquidity because they adhere to the controls of Islamic Sharia, and that most of the Islamic banks of the world are now facing the problem of excess liquidity more than liquidity deficit. The thesis also pointed out those Islamic banks can never escape the liquidity problem unless they completely abandon the nature of traditional financial intermediation.
2. Al – Saad, Ahmad Mohammad, and BaniKhaled, Hammoud (2014), "Challenges against Islamic Banks Liquidity as a Model", research presented to the first international conference for Islamic finance and banking on 6-7/8/2014.
The study assumes that Islamic banks are able to control an appropriate liquidity size and balance between liquidity and satisfactory profitability for dealers in the light of the central bank's tools and legislations. The researchers pointed out that in the end of 2009, the very liquid assets at the Jordanian banks were thirteen and half billion while the deposits, whether from clients or banks or banking institutions, were about thirty two and a half billion. Consequently, the liquidity ratio which is dividing the cash by deposits was equal to %36. The researchers produced some recommendations to rationalize the relationship between the central bank and Islamic banks when applying the liquidity ratio.

3. Al – Sa'di, Sawsan Mohammad Salim (2010), "Liquidity Risk at the Islamic Banks in Jordan". Master thesis in economy and Islamic banks, faculty of Sharia and Islamic Studies in Yarmouk University 2010.

The study investigated the liquidity problem in the Jordanian Islamic bank and its consequent risks. It touched upon the volume of liquidity available at the Islamic banks together with the subsequent risks and methods of treatment. The study indicated that Jordan Islamic bank, during (2004 – 2008), was able to meet all its obligations with relatively high liquidity surplus.

4. Laliddin, Akram (2010), "Liquidity Management in the Islamic Banks, analytical critical study, 20th session of the International Islamic Fiqh Academy in Mecca, 25 – 29 December, 2010.

This research aimed at studying liquidity management at Islamic banks with due focus on the Malaysian experience. The subject was discussed through identifying liquidity, its management, its importance, its components and its basic pillars of success. The study showed the Islamic monetary tools of liquidity management, success and discipline with Sharia controls. The paper focused on the Islamic instruments in relation to those tools by discussing their importance in liquidity management and negotiation controls. The research produced some results such as: Liquidity is the ability to finance the assets surplus and meet the obligations on maturity dates with no unforeseen losses.

5. Al – Araj, AhnanShaher (2010), "Liquidity Risk Management in the Banks Working in Jordan", journal of Baghdad College for university economic sciences, No. 25.

The study aimed at helping the banks working in Jordan to apply the best banking practices in liquidity risk management by identifying the factors recommended by Basel Committee in liquidity risk management and their application in those banks through responding to the questions of the study problem. The study pointed out the necessity of adopting a general framework to liquidity risk management and developing and placing strategies and policies for liquidity risk management as well as developing measuring and monitoring tools for those risks committing to the requirements of disclosure periodically and calling the controlling associations to develop their performance in a way that guarantees following up with the international banking market developments and executing stress testing circumstances.

6. Al – Sa'di, Sawsan Mohammad (2010), "Liquidity Risks at the Islamic Banks in Jordan": comparative study unpublished M.A in economy and Islamic banks in Yarmouk University, Jordan.

The study aims at identifying liquidity risks at the Jordanian Islamic banks and specifying the reasons and factors which lead to the aggravation of the liquidity problem in those banks. The study revealed the rise of liquidity ratio in the Jordanian Islamic banks making them keep cash reserves with no return and this is because the central bank applies on those banks the same rules and standards applied on the traditional banks. Moreover, the rise of their working capital means that they are in a safe condition. During the study, it appeared that they are able to cover their due obligations as well as their inaptness to utilize the last resort function.

7. Al – Kour, Ezziddeen Mustafa (2008), "The Impact of Liquidity on Cost Efficiency Performance: Applied study on the Jordanian Islamic Banks", second Islamic financial services conference, Tripoli.

The study aims at recognizing the impact of liquidity items on cost efficiency and whether liquidity management has negative impact on cost efficiency and on the performance of the Jordanian Islamic banks in the period from 1993 to 2008. The study recommends the Arab banks in general and the Libyan banks in particular, which lately started working in accordance with Islamic financial modes and tools, to consider the importance of efficiency at the level of cost and profit and the significance of liquidity management for its impact on the bank's value and its ability to compete and grow. The study also highlighted the concept of liquidity through an Islamic perspective and explained the manner of liquidity management at traditional banks with its legality in the light of Islamic Sharia. It also touched upon the Malaysian experience in liquidity management at its Islamic banks. The thesis indicated that some of the methods used by Islamic banks in Malaysia Contradict Sharia provisions of transaction and recommended their correction by applying Sharia methods in liquidity management.

8. Al –Darabseh, Bashar (2008), "The Impact of Cash Surplus on Profitability Ratios in Commercial Banks", Master thesis, Yarmouk University, Jordan.

The study aimed at identifying the cash flow volume at the Jordanian traditional banks, recognizing the ability of traditional banks to employ their cash surplus and identifying the impact of the cash surplus of the Jordanian traditional banks on their profitability index as cash surplus at traditional banks provides different types of investment and employment. The study presented a set of results and recommendations most importantly: All Jordanian traditional banks adhere to the legal liquidity ratio where the profitability ratio of the Jordanian traditional banks is reversely affected by their cash surplus.

Liquidity Management in Islamic Banks
Bank liquidity is defined as: "The ability to confront short – term obligations on maturity dates and respond to credit requests. This requires the bank to keep part of its assets as liquid plus quasi liquid assets, i.e those that can be easily converted into cash with no loss in value and its ability to borrow to meet the ordinary and urgent withdrawals or to grant new loans"(Bradiah, 2011: 2-3) .

As for the liquidity in the Islamic bank, it is defined as: "The ability of the bank to meet the depositors' withdrawals and fulfill the demands of the financed in due time without resorting to the sale of stocks with big losses or to funding sources of high cost" (Al- Omar, 1996: 109).

Cash flow in Islamic banks is defined as: "The ability to meet current obligations to guarantee the activities progress with no problems or obstacles in addition to the rational investment of the available funds to realize the maximum possible returns in the light of the provisions and principles of Islamic Sharia"(Shehatah, 2010) liquidity is compiled in Islamic banks from several sources represented in (Laluddin, 2010)

Internal Sources: They represent small a rate from the total liquidity and include the shareholders rights from the capital and reserves and retained profits in addition to some other sources like good loans and finance on account of the capital.

External Sources: Include all types of deposits like under demand deposits (current accounts), savings, investment deposits, financial institutions deposits, instruments, saving books and deposit certificates. Liquidity elements in the Islamic bank are represented in all cash and quasi – cash assets which give it the ability to meet withdrawal requests and settle short – term obligations easily without or with the least losses, in addition to completing finance and investment operations. Those elements are divided into two main groups which are (Al-Maghrabi, 2004: 143).

1. **Cash Liquidity:** Consists of liquid assets and includes the cash of the bank in local or foreign currency, deposits at other banks and the deposits at Islamic banks.
2. **Quasi Cash Liquidity:** Consists of the assets which can be transformed to full liquidity without or with the least losses and includes stocks and the guaranteed dues with clients within three months, the negotiable certificates issued by the Islamic bank and governmental securities or else which are acceptable by the Islamic bank.

Liquidity is an indicator to the bank's ability to meet its obligations of immediate payment and one of the methods that protect the bank from bankruptcy risks. Liquidity is of the most important indicators on which clients, management and analyzers depend to evaluate and compare banks. Banks are more characterized with liquidity than other institutions as they cannot delay the payment of a due deposit or postpone cashing a cheque. They cannot also ask debtors to pay their immature payments in addition to the difficulty of expecting the size and timing of the in and out payments (Atiyyah, 1407 H). Therefore, the importance of liquidity in the Islamic banks appears in (Al-Shamari, 2009: 376).

1. Ensuring the ability of the bank to meet its obligations.
2. Enhancing the clients and shareholders trust in the bank and its ability to instant responding to their requirements.
3. Positive indicator at the corresponding banks and classification bodies and else.
4. Vital indicator in the financial market and for depositors, management, analyzers and classifiers.
5. Maintaining its assets by not selling them with loss to redeem liquidity deficit.
6. No need to borrow with interest from the central bank or traditional banks.
7. Flexible choice as liquidity provides the possibility of looking for the best investment.
8. Avoiding searching for costly funding sources.

The nature of liquidity in the Islamic banking system differs from that of the traditional system in that Islamic banks do not have to specify a certain ceiling of liquidity to meet the withdrawals on investment deposits under legal Mudarabah, so it is not possible to withdraw the funds of any project before the expiry of term. Consequently, their liquidation or Altndad estoppel as such the depositor may not withdraw their funds according to the contract ('Ebadah, 2008: 67).

First demand: Allocating funds in a way that guarantees meeting deposit

Second demand: Fund provident to meet the requirements of finance and investment of the bank's clients and the surrounding environment to achieve appropriate profits under the liquidity demands and a compatible level of risks (Al-Husseini, 2008).

It is worth pointing out the existence of several requirements that contribute in the impactive management of liquidity in Islamic banks among which are (Al-Maghrabi, 2004: 144).

First Requirement: Planning cash flows in the Islamic bank.

Here, cash flows have to be analyzed to provide a certain level of liquidity to meet the following needs:

1. The ordinary requests of current deposit owners.
2. The ordinary and sudden requests of saving deposit owners.
3. The ordinary and sudden requests of investment deposit owners – if may be withdrawn before due time - .
4. Different finance requests for Murabaha, Mudarabah and Musharakah.
5. Taking the available investment opportunities.
6. The ordinary expenses of the bank.

Second Requirement: Applying the rule of term proportionality as an introduction to liquidity management

Most frequently, banks distribute their funds on different employment fields without considering due dates or terms. This creates great burden on liquidity management of the bank with the possibility of bankruptcy (Jeddah, 2009) Therefore, banks must allocate their funding sources on their employment according to terms as follows (Al-Maghrabi, 2004: 145-146).

1. Current Deposits: Allocated for cash accounts, bank accounts and short – term funding like Murabaha.
2. Savings Deposits: Allocated for cash accounts, bank accounts, and short – term funding and long – term investments.
3. Investment Deposits: A portion of which is allocated for cash, short – term and long – term funding like Musharaka and Mudaraba.
4. Funds owned by the bank: Allocated for fixed assets and long – term investments.

Liquidity Management at Islamic Banks

Liquidity management at Islamic banks can be defined as: "Accommodating liquidity collection in the shortest time and best price with investing and employing it in a feasible manner (Abu Ghada, 2004:142), or "The optimal investment of the available funds to realize the maximum return and the ability to meet the obligations toward creditors at the minimum cost"(Shehatah, 2010: 14). From this definition, we find that liquidity management has two main elements (Shehatah, 2010: 14).

First: Investing the liquidity excess in order not to miss investment opportunities which could possibly be used to achieve maximum returns, as holding liquidity excess from investment is a negative indicator to the incompetency of cash management.

Second: The ability to meet obligations through appropriation between assets and demands in terms of period, return and provision of funding to avoid liquidity risks. Liquidity management at the Islamic bank aims at the following (Al Dweik, 2010: 22-23)?

1. Providing sound banking management that deals with non – superfluous level of deposits and does not affect profitability.
2. Maintaining adequate liquidity to meet its urgent obligations and needs without resorting to sell some of its assets which exposes it to losses.
3. Achieving maximum return able to compete in the banking sector.
4. Placing controls and principles to lessen the risk level in the fields of employment and investment.
5. Reducing the investment risks resulted from the financial markets in which the bank is investing part of its tools and diversification in securities portfolio.
6. Placing minimum rates for the needed liquidity volume which accommodates with the requirements of cash authorities and bank activities.
7. Periodical review to the liquidity policy in compliance with the bank's activities.

Liquidity Measurement Indicators in Islamic Banks

Liquidity ratio in Islamic banks is measured by the extent of the bank's usage of deposits to cater the clients' needs – deposit employment ratio – The highest the rate was, the more significant the bank's efficiency was to meet the extra fundings. There is a number of ratios that enable us to measure the liquidity of the Islamic bank (Al-Maghrabi, 2004:66).

1- Legal Monetary Reserve Ratio

It represents the reserve of the Islamic bank kept at the central bank, and this ratio is compulsively determined under a law by the monetary authorities represented by the central bank. This ratio is calculated through the following equation:

$$\text{Legal monetary reserve ratio} = \frac{\text{Monetary balances deposited at the central bank}}{\text{Total deposits} + \text{other obligations}}$$

Other obligations generally include the monetary balances due to other banks.

2- Monetary Balance Ratio

This ratio is the criterion which enables us to know the bank's liquidity because the monetary balance of Islamic banks is affected by the withdrawal and deposit operations of the same banks, and this ratio is calculated through the following equation:

$$\text{Monetary balance ratio} = \frac{\text{Balance deposited at the central bank} + \text{ready cash at the bank}}{\text{Total deposits} + \text{other obligations}}$$

3- General Liquidity Ratio

This means the ability of the bank to settle its due obligations in general depending on its liquid and very liquid assets and calculated through the following equation:

$$\text{General liquidity ratio} = \frac{\text{Balance at central bank} + \text{ready cash at the bank} + \text{very liquid assets}}{\text{Total deposits} + \text{other obligations}}$$

4- Liquid assets to total assets ratio
This ratio is used to identify the relative importance of the liquid assets (cash and quasi – cash) among the total assets of the bank, which contributes in identifying the liquidity situation compared to the other uses of the bank and is calculated (Al-Maghrabi, 2004:149).

$$\text{Liquid assets to total assets ratio} = \frac{\text{Total liquid assets (cash and quasi cash)}}{\text{Total assets}}$$

5- Liquid assets to total deposits ratio
This ratio measures the bank's likelihood to pay back demand deposits and is calculated as (Al-Maghrabi, 2004:149).

$$\text{Liquid assets to total assets ratio} = \frac{\text{Total liquid assets (cash and quasi cash)}}{\text{Total deposits}}$$

Analyzing profitability and its relation to banking liquidity
Banking Profitability
Profitability in the form of retained earnings is one of the main sources to generate capital. Profitability is defined as: "The indicator that detects the competitive status of the bank in banking markets as well as the quality of its management. It allows the bank to keep specific risk and provide fulfillment against short – term economic problems" (Hammad, 2005: 477).
Banking Profit rates are divided into two issues (Omar, 1989: 477).
First issue: The difference in the risk degree among the different economic activities; the higher the risk level in banking activities, the bigger the profit rate and this reflects in turn on banking liquidity and vice versa.
Second issue: The difference in efficiency among managers. The more efficient the manager was in the management and organization of the bank, the higher the profit rate was and vice versa.
Profitability Analysis
There are several indicators related to profitability rate and which express the bank's ability to generate profits by using the available financing and investment formats as well as the importance of those rates for the management, owners, creditors and the government. The bank's profits are of the most important factors that affect the owners' wealth. In addition, the insufficiency of profits and their dip below expectations is considered as an unsatisfactory indicator through the perspective of creditors.

The most significant challenges faced by banks is balancing and harmonizing between liquidity and profitability targets. This is because banks depend on depositors' funds to achieve profitability through investing the most possible amount to realize the best returns. This is a contradiction. Therefore, the excessiveness in keeping great liquidity makes the bank lose the investment opportunities that may increase its profitability, so there is inverse proportionality between liquidity and profitability provided that profitability would not be high on account of liquidity shortage as this deprives the bank from its ability to meet its obligations toward the clients' withdrawals. Therefore, in many cases, profitability is the target of the bank while liquidity is the entry on this target (Bin Mas'udah, 2008: 160).

Indicators of profitability:
1- Return on Equity Ratio (ROE)
It measures the achieved return ratio from investing the owners' funds and calculated according to the following format:

$$\text{Return on Equity Ratio} = \frac{\text{Net income after tax}}{\text{Total equity}} \times 100\%$$

2- Return on Assets Ratio (ROA)
It measures the relationship of the bank's profits with its total assets according to the following format:

$$\text{Return on Assets Ratio} = \frac{\text{Net income after tax}}{\text{Total assets}} \times 100\%$$

3- Return on Deposits Ratio
This is used to measure the successfulness of the bank's management in generating profits from its deposits and calculated as follows (Abu Hamad, 2005: 352)[*].

$$\text{Return on Deposits Ratio} = \frac{\text{Net income after tax}}{\text{Total deposits}} \times 100\%$$

4- Return on Available Funds Ratio
It measures the bank's efficiency to generate profits from the available funds (owners funds and deposits) high rates refer to the bank's ability to achieve returns from employing funds in profitable assets and indicates the

efficiency of the bank management (Al-Humeiri, 2005: 22) [*]

$$\text{Return on Available Funds Ratio} = \frac{\text{Net profit after tax}}{\text{Deposits + equity}} \times 100\%$$

Statistical Analysis

This chapter deals with the statistical analysis of the study data, whereby the study variables were exhibited and then the hypotheses were tested.

First: Description of the study variables

This chapter shows the descriptive statistics of the study variables (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio, return on assets, return on equity, bank size) depending on the annual----- financial statements of the Jordan Islamic bank and the Arab Islamic bank in the period (2008 – 2014).

Independent Variables

Table (1) descriptive statistics of the annual dependent variables values of the study in the period (2007 – 2013)

Variable	Bank	Arithmetic mean	Standard deviation	Maximum value	Minimum value
Liquidity ratio	Islamic	0.431	0.100	0.530	0.270
	Arab	0.263	0.139	0.450	0.080
Liquid assets to total deposits ratio	Islamic	47.944	10.587	55.650	30.940
	Arab	28.756	14.149	46.570	9.120
Legal liquidity	Islamic	140.317	19.644	159.700	115.050
	Arab	156.367	21.143	176.250	116.000

1. The annual liquidity mean at Jordan Islamic bank reached at (0.431) with a standard deviation of (0.100), and the highest recorded value was (0.530) while the least registered value was (0.270). Moreover, the annual liquidity mean at the Arab Islamic bank reached at (0.263) with a standard deviation of (0.139) and the highest recorded value was (0.450) while the least recorded value was (0.080).

2. The annual liquid assets to total deposits mean at Jordan Islamic bank reached at (47.944) with a standard deviation of (10.587), and the highest recorded value was (55.650) while the least registered value was (30.940). Moreover, the annual return on equity mean at the Arab Islamic bank reached at (28.756) with a standard deviation of (14.149) and the highest recorded value was (46.570) while the least recorded value was (9.120).

3. The annual legal liquidity mean at Jordan Islamic bank reached at (140.317) with a standard deviation of (19.644), and the highest recorded value was (159.700) while the least registered value was (115.050). Moreover, the annual legal liquidity mean at the Arab Islamic bank reached at (156.367) with a standard deviation of (21.143) and the highest recorded value was (176.250) while the least recorded value was (116.000).

Dependent variables: Financial performance standards

Table (2) descriptive statistics of the values of annual dependent variables of the study in the period (2008 – 2014)

Variable	Bank	Arithmetic mean	Standard deviation	Maximum value	Minimum value
ROA	Islamic	1.304	0.291	1.900	0.980
	Arab	0.810	0.297	1.170	0.250
ROE	Islamic	16.557	2.611	21.830	13.690
	Arab	9.026	3.940	13.470	2.210

In table (2), we notice the following:

1. The annual return on assets mean at Jordan Islamic bank reached at (1.304) with a standard deviation of (0.291), and the highest recorded value was (1.900) while the least registered value was (0.980). Moreover, the annual return on assets mean at the Arab Islamic bank reached at (0.810) with a standard deviation of (0.297) and the highest recorded value was (1.170) while the least recorded value was (0.250).

2. The annual return on equity mean at Jordan Islamic bank reached at (16.557) with a standard deviation of (2.611), and the highest recorded value was (21.830) while the least registered value was (13.690). Moreover, the annual return on equity mean at the Arab Islamic bank reached at (9.026) with a standard deviation of (3.940) and the highest recorded value was (13.470) while the least recorded value was (2.210).

Control Variable: Average Total Assets (Bank Size)
Table (3) descriptive statistics of the total annual assets in the period (2008 – 2014)

Variable	Bank	Arithmetic mean	Standard deviation	Maximum value	Minimum value
Bank size	Islamic	2,770,041,499	602,543,134	3,554,739,368	1,848,373,078
	Arab	1,185,267,919	214,819,549	1,568,855,695	907,628,014

Table (3) shows that the average annual total assets at Jordan Islamic bank reached at (2,770.0) million JD with a standard deviation of (605.5) million JD, and the highest recorded value was (3,554.7) million JD while the least recorded value was (1,848.4) million JD. Moreover, the average annual total assets at the Arab Islamic bank was (1,185.3) million JD with a standard deviation of (214.8) million JD and the highest recorded value was (1,568.9) million JD while the least recorded value was (907.6) million JD.

Hypotheses Test Results
1. First hypothesis results: There is no statistically significant impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on assets at the Jordanian Islamic banks.

Table No. (4) shows the results of the first hypothesis test, F value (F = 4.685) was at the significance level (Probe (F statistic) = 0.036) which is less than 0.05 which indicates the rejection of the null hypothesis H01 and the acceptance of the alternative hypothesis which states that there is a statistically significant impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on assets at the Jordanian Islamic banks. The value of (R^2 = 0.637) pointed out that %63.7 of the variance in the return on assets can be interpreted through the variance in the liquidity risks attenuators. As for the value of the regression coefficient at (liquidity ratio), it reached at (- 13.508) which means that the impact is incorporeal were the value of (t = - 2.469) at a significance level (sig (T) = 0.039) which is less than 0.05, and the value of regression coefficient at (liquid assets / total deposits) was (0.131) which indicates that the impact is incorporeal where the value of (t = 2.695) at a significance level of (sig (T) = 0.027) which is less than 0.05 while the value of regression coefficient at (the legal liquidity ratio) reached at (- 0.009) which means that the impact is incorporeal where the value of (t) was (t = - 2.310) at a significance level (sig (T) = 0.049) which is less than 0.05.

Table (4): Results of liquidity risks attenuators impact test on the return on assets

Dependent variable: ROA					
Method: Panel EGLS (Cross – section weights)					
Independent variable	**Regression coefficient**	**Standard deviation**	**Calculated T**	**Sig (T)**	**VIF**
Liquidity ratio	-13.508	5.472	- 2.469	0.039	**1.765**
Liquid assets / total deposits	0.131	0.049	2.695	0.027	**4.606**
Legal liquidity	-0.009	0.004	- 2.310	0.049	**3.784**
Regression constant	2.071	0.601	3.444	0.009	
R^2	**Adjusted R2**	**Calculated F**	**Probe(F - statistics)**	**D – W**	
0.637	**0.5013**	**4.685**	**0.036**	**0.851**	

2. Second hypothesis results: There is no statistically significant impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on equity at the Jordanian Islamic banks.

Table No. (5) shows the results of the second hypothesis test, F value (F = 4.301) was at the significance level (Probe (F statistic) = 0.044) which is less than 0.05 which indicates the rejection of the null hypothesis H02 and the acceptance of the alternative hypothesis which states that there is a statistically significant impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on equity at the Jordanian Islamic banks. The value of (R^2 = 0.617) pointed out that %61.7 of the variance in the return on equity can be interpreted through the variance in the liquidity risks attenuators. As for the value of the regression coefficient at (liquidity ratio), it reached at (- 126.653) which means that the impact is corporeal were the value of (t = - 1.902) at a significance level (sig (T) = 0.094) which is less than 0.05, and the value of regression coefficient at (liquid assets / total deposits) was (1.283) which indicates that the impact is corporeal where the value of (t = 2.174) at a significance level of (sig (T) = 0.061) which is less than 0.05 while the value of regression coefficient at (the legal liquidity ratio) reached at (- 0.123) which means that the impact is incorporeal where the value of (t) was (t = - 2.447) at a significance level (sig (T) = 0.040) which is less than 0.05.

Table (5) Results of liquidity risks attenuators impact test on the return on equity

Dependent variable: ROE					
Method: Panel EGLS (Cross – section weights)					
Independent variable	Regression coefficient	Standard deviation	Calculated T	Sig (T)	VIF
Liquidity ratio	-126.653	66.587	- 1.902	0.094	**1.765**
Liquid assets / total deposits	2.283	0.590	2.174	0.061	**4.606**
Legal liquidity	-0.123	0.050	- 2.447	0.040	**3.784**
Regression constant	25.879	7.297	3.547	0.008	
R^2	**Adjusted R2**	**Calculated F**	**Probe(F - statistics)**	**D – W**	
0.617	**0.474**	**4.301**	**0.044**	**1.991**	

3. Third hypothesis results: There is no statistically significant impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on assets at the Jordanian Islamic banks adopting the bank size.

Table No. (6) shows the results of the third hypothesis test, F value (F = 9.824) was at the significance level (Probe (F statistic) = 0.005) which is less than 0.05 which indicates the rejection of the null hypothesis H03 and the acceptance of the alternative hypothesis which states that there is a statistically significant impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on assets at the Jordanian Islamic banks adopting the bank size. The value of (R^2 = 0.849) pointed out that %84.9 of the variance in the return on assets can be interpreted through the variance in the liquidity risks attenuators and the bank size. As for the value of the regression coefficient at (liquidity ratio), it reached at (- 10.584) which means that the impact is incorporeal were the value of (t = - 3.099) at a significance level (sig (T) = 0.017) which is less than 0.05, and the value of regression coefficient at (liquid assets / total deposits) was (0.099) which indicates that the impact is incorporeal where the value of (t = 3.053) at a significance level of (sig (T) = 0.019) which is less than 0.05 while the value of regression coefficient at (the legal liquidity ratio) reached at (- 0.007) which means that the impact is incorporeal where the value of (t) was (t = - 4.112) at a significance level (sig (T) = 0.040) which is less than 0.05. It appeared that the impact of the bank size was corporeal, its regression coefficient was (0.230), and the value of (t = 1.676) at a significance level of (sig (T) = 0.138) which is higher than 0.05.

Table (6): Results of liquidity risks attenuators impact test on the return on assets adopting the bank size

Dependent variable: ROA					
Method: Panel EGLS (Cross – section weights)					
Independent variable	Regression coefficient	Standard deviation	Calculated T	Sig (T)	VIF
Liquidity ratio	-10.584	3.415	- 3.099	0.017	**2.019**
Liquid assets / total deposits	0.099	0.032	3.053	0.179	**4.606**
Legal liquidity	-0.007	0.002	- 4.112	0.005	**3.910**
Bank size	0.230	0.138	1.676	0.138	**4.005**
Regression constant	3.042	0.457	-1.238	0.256	
R^2	**Adjusted R2**	**Calculated F**	**Probe(F - statistics)**	**D – W**	
0.849	**0.762**	**9.824**	**0.005**	**1.812**	

4. Fourth hypothesis results: There is no statistically significant impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on equity at the Jordanian Islamic banks adopting the bank size.

Table No. (7) shows the results of the fourth hypothesis test, F value (F = 5.125) was at the significance level (Probe (F statistic) = 0.030) which is less than 0.05 which indicates the rejection of the null hypothesis H04 and the acceptance of the alternative hypothesis which states that there is a statistically significant impact of liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on equity at the Jordanian Islamic banks adopting the bank size. The value of (R^2 = 0.745) pointed out that %74.5 of the variance in the return on equity can be interpreted through the variance in the liquidity risks attenuators and the bank size. As for the value of the regression coefficient at (liquidity ratio), it reached at (- 166.015) which means that the impact is incorporeal were the value of (t = - 41.914) at a significance level (sig (T) = 0.000) which is less than 0.05, and the value of regression coefficient at (liquid assets / total deposits) was (1.558) which indicates that the impact is incorporeal where the value of (t = 68.154) at a significance level of (sig (T) = 0.000) which is less than 0.05 while the value of regression coefficient at (the legal liquidity ratio) reached at (- 0.067) which means that the impact is incorporeal where the value of (t) was (t = - 4.068) at a significance level (sig (T)

= 0.005) which is less than 0.05. It appeared that the impact of the bank size was corporeal, its regression coefficient was (0.230), and the value of (t = 1.676) at a significance level of (sig (T) = 0.138) which is higher than 0.05.

Table (7): Results of liquidity risks attenuators Impact test on the return on equity adopting the bank size

Dependent variable: ROA
Method: Panel EGLS (Cross – section weights)

Independent variable	Regression coefficient	Standard deviation	Calculated T	Sig (T)	VIF
Liquidity ratio	-166.015	3.961	- 41.914	0.000	**2.019**
Liquid assets / total deposits	1.558	0.020	68.154	0.000	**4.996**
Legal liquidity	-0.067	0.017	- 4.068	0.005	**3.910**
Bank size	5.407	1.595	3.390	0.012	**4.005**
Regression constant	35.122	35.041	-2.715	0.030	
R^2	Adjusted R2	Calculated F	Probe(F - statistics)	D – W	
0.745	0.600	5.125	0.030	1.800	

Results and Recommendations
Results

1. The annual liquidity ratio, the liquid assets to the total deposits ratio and the legal liquidity ratio at Jordan Islamic bank were larger than those at the Arab Islamic bank during the period of the study.
2. The annual return on assets ratio at Jordan Islamic bank was higher than that at the Arab Islamic bank during the period of the study.
3. The annual return on equity ratio at Jordan Islamic bank was higher than that at the Arab Islamic bank during the period of the study.
4. The total average annual asset at Jordan Islamic bank was larger than that of the Arab Islamic bank during the period of the study.
5. There is a statistically significant impact of the whole liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on assets in the Jordanian Islamic banks.
6. There is a statistically significant impact of the whole liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on equity in the Jordanian Islamic banks.
7. There is a statistically significant impact of the whole liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on assets in the Jordanian Islamic banks adopting the bank size.
8. There is a statistically significant impact of the whole liquidity risks (liquidity ratio, liquid assets to total deposits ratio, legal liquidity ratio) on the return on equity in the Jordanian Islamic banks adopting the bank size.

Recommendations

1. Jordanian Islamic banks should not exaggerate in keeping liquidity and must look for tools to employ the excess liquidity maintaining suitable and balanced combination of assets and obligations in addition to a clear and flexible plan to deal with any urgent liquidity crisis.
2. Depending on various fund sources and employments concerning sectors and terms.
3. Depending on a vast grassroots of clients through spreading a wide grid of branches and offices.
4. Depending, as much as possible, on term investment deposits and concentrating on fund employment at medium and long – term basis with appropriation to the short – term employment.
5. Placing flexible plans continuously for managing and reviewing liquidity to avoid any surplus or shortage in liquidity as well as analyzing the surplus or shortage through assessing cash outflows and inflows in addition to the bank's obligations toward other parties.
6. The bank has to establish a general framework for liquidity risk management to guarantee the provision of adequate liquidity in the form of high – quality liquid assets as a coverage to confront any unforeseen circumstances.
7. The bank is to put a tolerable limit for liquidity risks in agreement with its total acceptable risk volume.
8. The bank is to consider the liquidity costs, benefits, pricing risks, performance efficiency to be able to link the potential total risk volume with the liquidity risk volume.
9. The bank is to place a financing strategy which ensures the diversity of the sources and terms of funding and to maintain strong relations with the different parties through which it obtains its funding requirements.

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