EXPRESSIVE DESCRIPTION OF THE STATE OF LIQUIDITY RISK IN ISLAMIC BANKS

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A B S T R A C T

The criticality of liquidity to the financial intermediation institutions cannot be overemphasized. It is germane to the survival, growth and development of Islamic banking industry. Ability to properly manage liquidity and its risk is a function of identifying causes of the risk and its degree. A bank with well managed liquidity survives any liquidity problem and stands test of the time. Proper understanding as well as managing the liquidity risk demands understanding the causes and the level of liquidity risk. This paper employs MS Excel to analyze the IBIS data in order to determine the position of the liquidity risk in Islamic banking institutions.
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INTRODUCTION

It is no longer a hidden fact that Islamic banks are equally prone or exposed to all the risks plaguing conventional banks, if not more as a result of the Islamic banks' adherence to the *Shari'ah* mode of operation. In order words, risks cut across religion boundaries. One of such risks recently identified as a prominent one is liquidity risk. Studies such as Sabri (2013) and Muhammad et al (2011) believe that liquidity risk is particularly critical to the survival and growth of any financial institution either Islamic or conventional. Thus, liquidity risk is of major concern to the policy makers, regulators as well as the management. Liquidity risk

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refers to the risk on a bank's earnings and capital arising from bank's inability to promptly meet its due financial obligations without incurring objectionable losses (Sayyad & Moazzan, 2011).

Hence, it is pertinent for the bank management to ensure availability of funds that is sufficient enough and cost reasonable to meet potential demands of the customers. The dynamism of a bank's liquidity risk varies and depends on some factors which include the following among others; rising cost of funding, funding market, request for collateral, corporate structure, decrease in availability of long-term funding, and decline in rating (Derhmann & Kleopatra, 2010). However, what determines how well a bank is managed depends on the sophistication of its liquidity risk management strategy which is a function of the bank's business activities and the general level of risk. Irrespective of the size or complexity, a well-managed bank needs to comply with the due process of liquidity risk management and exhibits ability to proactively identify, assess, control and monitor its liquidity risk (Salman, 2013).

This paper therefore, intends to examine the dynamism of liquidity risk in Islamic banking industry using data collected from Islamic Banks Information System (IBIS) on four different countries (Malaysia, Saudi Arabia, Indonesia and Qatar). They represent the South East Asian and the Gulf regions regarded as hubs of Islamic Banking and Finance. The rest part of the paper is divided to four sections. The significance of liquidity management is discussed in section two. Section three discusses liquidity risk management in Islamic banking institutions. Section four focuses on identifying the current positions of liquidity risk in Islamic banks and section five concludes the paper.

SIGNIFICANCE OF LIQUIDITY MANAGEMENT

The traditional primary sources of funding for banks are retail transaction and savings accounts which are generally considered as stable and low-cost source of funds. Retaining these core sources of deposit becomes more difficult due to proliferation of many alternative investments and savings medium the customers are now enjoying (Gambacorta & Davud, 2011). Therefore, sourcing for liquidity and the consequent liquidity risk are giving the banks' management a greater concern and challenges now than ever (Caruana, 2011). This has triggered ever increasing competition and scrambling for the available customer deposits and financial market funding products. In addition, structural changes in funding banks and risk management as a result of technological innovations pose a greater challenge. In fact, recent studies show that reliance of banks on core deposits as avenue for obtaining liquidity had decreased drastically as a result of shift in customers' interests to explore other alternative means of investment and the returns they offer. This had stagnated the growth of core deposit' percentage of banks asset which may possibly decline in the nearest future. However, banks are succeeding in their efforts to satisfy the

quest/demand for loan and meet the investment needs by relying on market sources which help them in diversifying their funding bases across maturities and among funds providers Murillo et al, 2011).

Banks, as a result of over reliance on markets as sources of funding become exposed to fluctuation in price and credit sensitivities as institutional funds provider are extra sensitive to credit compared to the retail customers and will be reluctant to make funds available to a troubled bank (Saheed, 2014). In addition, indirect-related events sometimes hinder the ability of banks to have access to the capital markets. In order to meet their funding requirements, banks have increasingly opted for asset securitization and some other off-balance sheet strategies. Therefore, banks' involvement in all these activities increases either bank's access to liquidity or liquidity risks (Salman, 2013).

Although several studies on liquidity risk measurement and management differ on the arguments that the true nature or state/degree of liquidity risk of a financial institution cannot be ascertained from only financial statement of the institution because of the liquidity risks inherent in some off-balance sheet items but they have a point of convergence. The general consensus is that analysis of liquidity ratios, maturity mismatches (Maturity Gap) and the likes calculated from the financial information provided by financial statements can go a long way in giving insight into the state of liquidity as well as extent of inherent liquidity problems of an institution.

In order words these ratios cannot be considered as the perfect measure of liquidity risk but rather seen as just a simple representative measure of the risk so as to emphasize the importance of liquidity risk and to proof that Islamic banking institutions are also prone to liquidity risks like their conventional counterparts.

However, there are several possible measures which can provide insights that can be used to determine the state of liquidity/liquidity risk of Islamic banking institutions. Such measures include liquid assets to total assets ratio, stable deposit to total deposit ratio, financing to deposit ratio, profit sharing investment accounts (PSIA) to total deposit ratio, ratio of liquid assets to total deposits and short-term funding known as Maturity Mismatch Ratio (MMR) and so on. But due to lack of sufficient information/data, two of these measures (i.e. liquid assets to total assets and financing to deposit ratios) are utilized to analyze the trend in liquidity risk of Islamic banks in the selected four counties (Malaysia, Saudi Arabia, Qatar and Indonesia) used in this study. The data on Islamic banks in the selected countries which cover a period of six years (2006 to 2011) were obtained from Islamic Banks Information System (IBIS).

LIQUIDITY RISK MANAGEMENT IN ISLAMIC BANKING INSTITUTIONS

The current concern of all financial institutions is management of liquidity risk which is an integral part of larger risk management framework

(Muhammad et al, 2011). Understanding liquidity risk management is a critical but a very complex issue which if failed to be addressed may spur terrible consequences such as bank run, banking collapse and systemic financial crisis. Therefore, the paramount importance of liquidity risk management cannot be over emphasized as a single financial institution's liquidity shortfall is capable of causing system-wide repercussions (Saheed, 2014). The possible resultant instability in the financial system is at the moment giving the regulators great concern over the liquidity positions of financial institutions and redirects their thinking towards focusing on the strengthening of liquidity risk framework. However, Sabri (2013) holds it that to allay the fear and address the concern of the regulators demands defining, developing and implementing liquidity programmes which if properly instituted ensures healthy business and increases its ability to overcome any adverse situation.

Like conventional counterparts, maturity transformation function of Islamic banks makes them vulnerable to liquidity risks as banks' liquidity is a function of very financial transaction taking place and increasing involvement of Islamic banks in complex businesses requiring sophisticated risk management mechanisms Ahmad (2013). Liquidity risk in Islamic banks can be of two types. The type one is lack of liquidity in the market which as a result of illiquid assets makes difficult for Islamic banks to meet their financial obligations. The second, lack of access to funds caused by Islamic banks' lack of access to loans or inability raise necessary funds at a reasonable cost.

Hence, the paramount importance of liquidity risk management as a shortfall in liquidity can lead to financial crisis in a bank and by extension it is capable of leading to systemic wide repercussions while efficient liquidity risk management ensures Islamic bank's healthy operations, stability and growth. Ensuring a viable Islamic banking system requires understanding of Islamic banks' risk profiles, *Shari'ah* rules as well as uniqueness of Islamic banking operations.

CURRENT STATE OF LIQUIDITY RISK IN ISLAMIC BANKING SECTOR

Currently, there are many factors which restrict Islamic banks from investing in long term and profitable assets and thereby expose them to liquidity risks. However, Salman (2013) stressed that several proactive measures had been put in place in Islamic banking industry at the international level to address issues of Islamic banks' liquidity crisis. Some of these measures include; (i) introduction of Islamic bonds (*Sukuk*) upon which secondary market for Islamic banking was developed, (ii) development of institutional framework and infrastructures for the purpose of addressing any liquidity problem related issues. Attempts to develop liquidity risk management framework for Islamic banking institutions are being made by some Islamic Scholars and Researchers. In the case of infrastructures for effective liquidity management, the industry had witness establishment of institutional infrastructures such as International

Islamic Liquidity Management Corporation (IILM) headquartered in Malaysia, Liquidity Management Centre (LMC) situated in Bahrain and the International Islamic Financial Market (IIFM). In spite of all these efforts, the position of liquidity risk in Islamic Banking system remains fluctuating across the countries over time. Due to unavailability of adequate data, measuring the dynamisms of changing positions of the Islamic banks' liquidity risk is limited to the only two techniques discussed below.

The Liquid Assets to Total Asset Ratio

This ratio often referred to as liquidity risk ratio explicates proportionality of the available liquidity in a bank and when aggregated across banks reveal the proportion of the available liquidity within the banking system. In the context of this study a bank's deposit with other banks, cash and its equivalents are altogether defined as the Liquid Assets. The table 6.1 below displays figures representing percentages of liquidity ratios for Islamic banks from the four selected countries covering a period of six years (2006 – 2011). The figures represent the averages of Islamic banks' each year liquidity ratios for the selected countries.

Higher liquidity ratio is an indication of a bank's ability to better conserve liquidity and mitigate liquidity risk. Efficient management of liquidity entails balancing reserving funds to meet obligations when due and disbursement of funds for investments and/or financing purposes. Though higher liquidity ratio portends better management of liquidity which lessens the probability of liquidity shortages but at the same time reduces the earning opportunities of the banks as a result of reduction of investments and/or financing. Thus, the cost of higher liquidity ratio is the reduced returns.

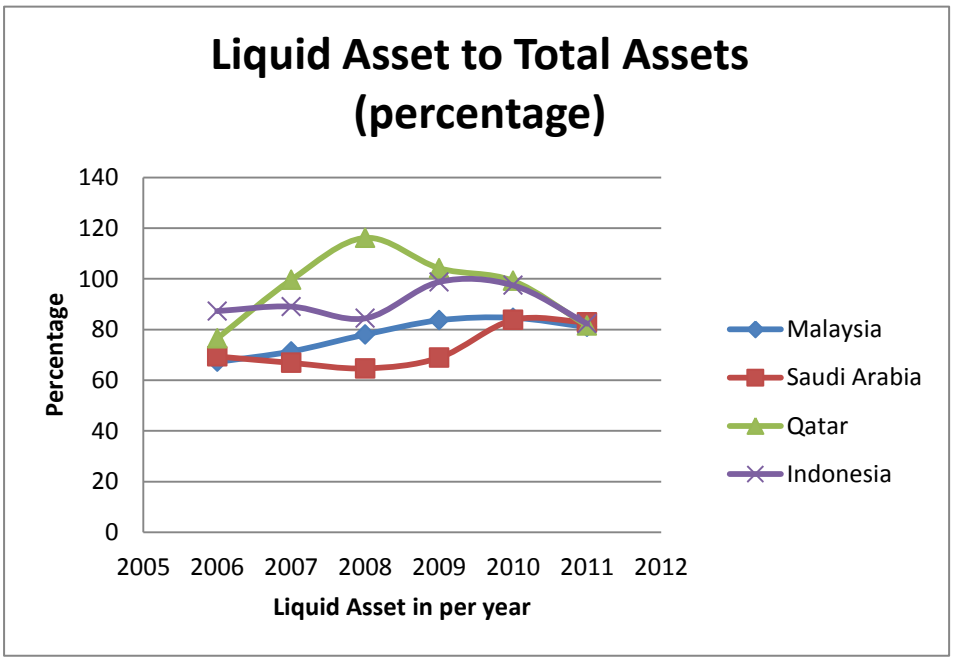
A critical look at the figures on table 1 and figure 1 shows that the liquidity ratios for each year vary across the countries. Comparatively, liquidity ratios were high in Malaysia and Qatar than that of Saudi Arabia and Indonesia with the exception of 2008 when Indonesian liquidity ratio astronomically skyrocketed to 54.97% from a mere 14.91% of the previous year. Table 1 and figure 1 also give a comprehensive picture of the extent of liquidity risk in the countries before, during and after the global financial crisis. Although, Indonesia recorded a very high liquidity ratio in 2008, but generally the liquidity ratios across the countries were low but relatively stable during the crisis and started picking up/improving after the crisis. This clearly indicates that the financial crisis had little impact on the Islamic banking sector too. It could also be deduced from the table 1 that holding high liquidity was the characteristics of Islamic banks before the crisis. But the reverse was the case afterwards. Shortly after the crisis increase in liquidity ratios could be noticed but did not last long before they started dropping again, especially in 2011 with exception of Malaysia with liquidity ratio of 40.78%. Thus, the era of having surplus liquidity by Islamic is gradually becoming something of the past and there are manifestations of gradual symptoms of possible liquidity shortages.

Table 1
Liquid Assets to Total Assets (Percentage)

Year	Malaysia	Saudi Arabia	Qatar	Indonesia
2006	27.08	14.31	33.42	18.18
2007	29.18	16.69	26.89	14.91
2008	25.45	12.17	18.74	54.97
2009	23.31	17.27	24.82	29.09
2010	20.14	20.45	22.31	20.09
2011	40.78	19.77	16.36	21.57

Source: Researcher's computation from IBIS data.

Figure 1



Financing to Deposit Ratio

This ratio expresses the ability of a bank to mobilize deposits to fund the ever changing demands for financing. It is considered the most commonly used liquidity risk ratio by the banks. A bank is presumed to be having liquidity risk if its liquidity ratio is high. Hence, the higher the liquidity ratio, the higher the liquidity risk of the bank. For a bank to efficiently manage the liquidity risk it has to ensure/maintain stable funding which increases as the demand for funding increases.

Table 2 and Figure 2 show that before the financial crisis the rate of deposits mobilized by the banks in the countries were higher than the rate of financing. This could be partially attributed to the deficiencies in availability of *Shari'ah* compliant investments opportunities. Afterwards,

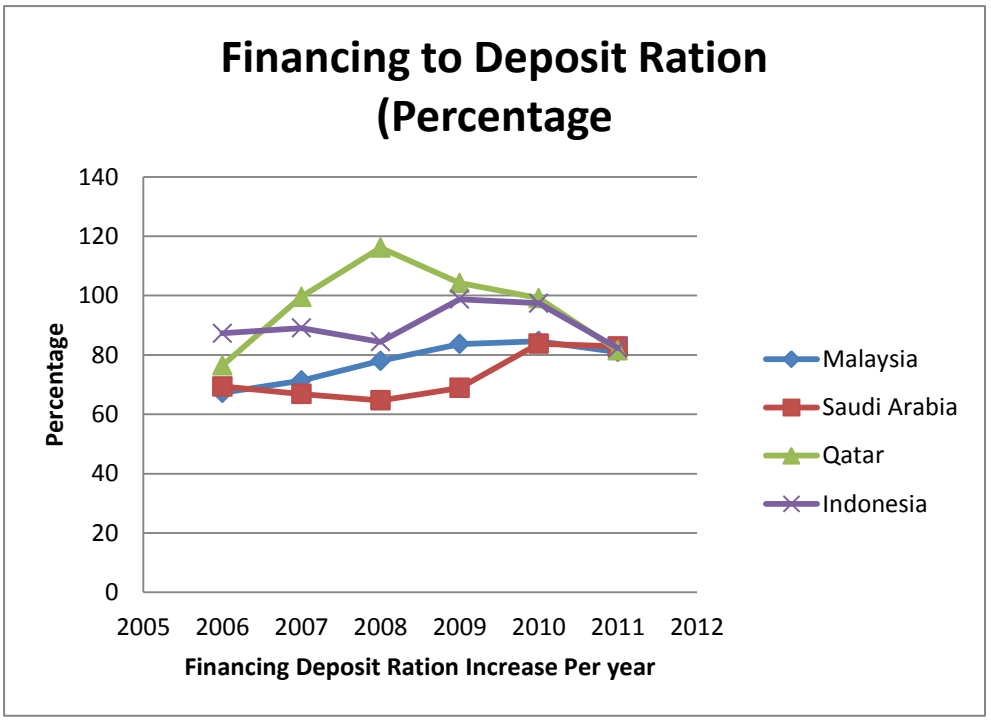
on average ratios across the countries started increasing and reached the peak between 2007 and 2009 to the extent that ratio for country like Qatar rose up to 116%. There was a little drop in the liquidity ratio in the subsequent years but still higher than before the crisis. The implication is that though deposits increased but the rate of growth of financing by many banks was higher than the growth rate of deposits which portends high liquidity risk. This period in question witnessed the distress/failure of some investments and commercial banks especially in the Gulf region e.g. Gulf Finance House of Bahrain.

Table 2
Financing to Deposit Ratio (Percentage)

Year	Malaysia	Saudi Arabia	Qatar	Indonesia
2006	67.21	69.39	76.47	87.28
2007	71.36	66.85	99.59	89.05
2008	78.01	64.66	116.16	84.42
2009	83.66	68.88	104.21	98.78
2010	84.64	83.78	99.18	97.41
2011	80.98	82.86	81.51	82.29

Source: Researcher's computation from IBIS data

Figure 2



CONCLUSION

Spurred by the impact recent global financial crisis on international banking system, quite a number of studies had established the paramount importance of liquidity to the well beings and well survival of banking system particularly Islamic banking system due to its infancy nature and uniqueness. Moreover, the continuous innovation and development in Islamic banking products have exposed the banking system to the unfamiliar liquidity risk. However, early identification of the symptoms and better understanding of the position of liquidity risk are desirable for proper alleviation and management of the problem.

In support of the previous studies, this paper also establishes the fact that Islamic banks are actually prone to liquidity risk just like their conventional counterparts. The yearly changes in the percentage of liquidity risk in the four selected countries for the study also confirm the Islamic banks' susceptibility and the fluctuation nature of liquidity risk in Islamic banks.

Therefore, it's pertinent for the management of Islamic financial institutions, policy makers as well as the regulators to put in-place mechanisms for identifying the symptoms and causes of the liquidity risk and devise means of regular assessment of the severity of the risk for it to be properly managed.

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