

# Liquidity Factors and Liquidity Risk Management for Financial Performance Improvement in the UAE Islamic Banking System

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## Abstract

The purpose of this study is liquidity factors and liquidity risk management to improve financial performance in the Islamic banking system in the United Arab Emirates. The study provides insights for policy makers and practitioners to select appropriate liquidity factor measures for Islamic banks in the UAE, which could eventually enable them to support their own liquidity factor policies, in a way that would expand their client base according to the aspects of liquidity factors, and not just the religious ones. It is also the first study that examines the determinants of liquidity factors in the United Arab Emirates. The study concluded that liquidity factors have a positive and important impact on financial performance. Therefore, it is recommended that banks in the UAE establish sound systems of governance and risk management by developing strategies and policies for liquidity factors that are well integrated into risk management practices as well as putting in place a contingency financing plan to address any liquidity shortfalls during periods of stress or emergency while ensuring that active liquidity control financing needs to avoid any liquidity risk management challenge that may lead to a crisis in banks, is addressed immediately.

**Keywords:** Liquidity Factors, Liquidity risk management, Financial performance. Islamic banks.

## 1. Introduction

The United Arab Emirates (UAE) continues to be a leading nation for the Gulf area and the Arab region, and is recently rated as one of the world's best-developed economies (World Bank, 2016) in the Middle East, North Africa and Gulf regions with the goal of being a top service economies (Ibrahim and Al Falasi, 2014).). The economy of the UAE is widely diversified with a population of more than 180 nationalities and involves travel, engineering, logistics as well as banking and finance (Jabeen et al., 2015). Therefore, after a period of constant growth, Islamic finance has expanded from offering banking services in the vicinity of capital markets, and today the Islamic financial industry includes Islamic banks, investment funds, investment companies, companies. of living investment companies and insurers. In the United Arab Emirates, the Dubai Islamic Bank was established in 1975 to 1975 for the start of an Islamic bank in the country and the second in the whole world. Federal law no. 6 of

1985, Islamic Banks of the EAU (ElMassah et al., 2018). This law defines these banks as those that function in accordance with the Islamic law of Sharia and under the supervision of the Central Bank. According to this law, Islamic banks and institutions must adopt the form of an anonymous public society. company and must obtain a license from the Central Bank before commencing its operations. In addition, a superior Sharia authority has been established to supervise Islamic banks (ElMassah et al., 2018). In the United Arab Emirates and to offer consultation when needed (Tamimi, 2015). During the period 2008-2012, the Islamic banks of the EAU achieved an average growth rate of 14%, that triples their traditional counterparts' growth rate. In addition, in the same era, the size of the assets of these banks hit US \$ 83 billion, which reflected 17% of the market share. This ratio in 2014 grew to 21.6%. Over 2008-2012, the UAE had an estimated 5% stake of global Islamic Banking Assets which rose to 15.4% of 2015 (Ernst and Young Global Limited, 2016).

Later, the 2008 global financial crisis posed questions regarding traditional banking activities and concentrated on Islamic banking, which demonstrated the sharing of risks. There are numerous benefits of Islamic financial goods, including a lower dependency on debt instruments and enhanced equity for increased risk sharing (ElMassah et al. 2018). These goods draw many more consumers that need financial services that adhere to their values based on faith (ElMassah, 2015). Liquidity management is important for all banks; moreover, Islamic banks are more threatened than traditional banks. This is because the Sharia'h rules banning several of the current interest-based liquidity management mechanisms are to be adopted by Islamic banks (Ariffen, 2016).

Main for the execution of monetary policy is liquidity control by the banks. Central banks have an influence on the trade-off between loan and liquid assets and have an effect on credit distribution and have an effect on the real economy across that channel. Understanding how liquidity is handled by the banks is also key to understanding monetary policy execution. The macro-economic model of banks' control of liquidity (Zidan 2020), in particular in monetary policy analytics, was mainly abstract. Liquidity control decreases the liability of the business, the danger of failing to satisfy its commitment on schedule or lowers the bank's profitability. To fulfil its short-term compulsions, a bank can ensure that it does not have a scarcity or surplus liquidity. For both internal and external researchers, a liquidity appraisal is of crucial significance because of its strong association with a business' daily operations (Lartey et al. 2016). The optimal exchange between liquidity factors and financial performance (Zidan, 2020) should be met by a problem of liquidity management. The value of a strong foundation of the liquidity control for potential operations of a bank cannot be appreciated, ensuring its own existence.

Due to liquidity issues, UAE banks experienced a challenge with lending to the private sector in 2008. A variety of economic prospects were also missed (ElMassah et al., 2018). The strong government funding was one of the key triggers of these funding issues. As a means of finance for the UAE, the government relies highly upon the banking sector. Liquidity

tests a bank's efficiency and the essence of the firm. However, banks that have strong liquidity are considered to sustain, maintain and improve their output. Strong management motivates administrators to retain successful leadership. Liquidity for bank success is also deemed healthy. The issue is when a bank cannot meet liquidity demand, particularly unforeseen liquidity demand, adversely affects its profits. Banks must also strive to optimise their income and thereby satisfy their liquidity criteria by retaining adequate liquidity in order to match revenues with liquidity while there is a compromise between liquidity factors and liquidity risk management for financial performance improvement. The key objective of this analysis was, in view of the need to maintain the highest balance between liquidity and productive, to decide and explain how liquidity factors and liquidity risk management for financial performance improvement in the UAE Islamic banking system.

## ***2. Literature review***

### ***2.1 Liquidity factors***

Following previous financial crises, liquidity vulnerability has received a lot of interest from both analysts and vulnerability practitioners. The possibility of liquidity will shock a bank and can also spark a bank run (Diamond and Rajan, 2005). This factors stems from the description of banking operations (Chaplin et al., 2000).

#### ***2.1.1. Deposits***

Savings are the lifeblood of a financial company. Many banking functions are performed through deposits. The bank will create a liquidity trap (Kumar 2018) that requires the bank to collect funds from the central bank or interbank market at a higher cost rate if depositors resume withdrawing their deposited funds from the bank. Alternatively, the above problems will not appear in a bank that has sufficient deposits in its accounts. It is therefore important for a bank to increase its deposits to enhance its profitability (Arif and Anees, 2012).

#### ***2.1.2. Cash***

Both banks are attempting to carry up adequate money to satisfy their unforeseen depositors' requirements (Majid, 2015; Arif and Anees, 2012), but it is rather costly to retain the

cash (Holmstrom and Tirole, 2000). Banks keeping a big cash reserve can not only miss a lot of trading opportunities, but also share the high cash costs.

### **2.1.3. Liquidity match**

*Liquidity match* between assets and liabilities is one of the key triggers of *Liquidity factors*. The majority of assets in the banking sector are financed with deposits which, in the majority of situations, are accessible at any time. It is recognised as an asset and obligation incompatibility (Brunnermeier and Yogo, 2009). The difference in maturity between assets and liabilities may be used to assess this imbalance (Arif and Anees, 2012). The *Liquidity match* deficit is also named (Plochan, 2017). Increased cash balance would build a challenge for liquidity (Goddard et al., 2009).

### **2.1.4. Improving non-performing loan**

Many banks concentrate on corporate or bulk loans, which presents the management with the challenge of retaining the necessary liquidity status (Arif and Anees 2012). This loan is primarily long term, which may cause difficulties for a bank with liquidity (Kashyap et al., 2012). During cycles of weak resource output in the economy, banks are slowed down by the loan pension process. That leads to unsuccessful improving non-performing loans. The liquidity problem is imminent as Improving non-performing loan rise rapidly (Arif and Anees, 2012).

### **2.2 Liquidity risk management**

Liquidity risk management in banks is defined as the risk of not being able to meet its obligations to depositors or to finance increases in assets as they fall due without incurring unacceptable costs or losses. Effective management of liquidity risk helps ensure the bank's ability to meet its obligations when they fall due and reduces the possibility of an adverse situation developing, Kumar and Yadav (2019). Banks face two major issues regarding liquidity. Banks are responsible for managing liquidity creation and liquidity risk. Providing liquidity helps depositors and companies retain liquidity, especially when other forms of financing become difficult. Liquidity risk management aims to ensure the liquidity of banks so that the bank can continue to perform its function, Vossenand Ness (2019).

### **2.3 Financial Performance**

Financial performance is a set of measures used to assess the healthiness of banks including some form of risk assessment (Quarshie, (2020), and it is used as a key internal performance measure for every bank entity (Saeidi et al., 2015). Bank financial performance is not limited to quantitative measures and can include indicators of customer relations and the quality of its relationships with other financial institutions (Golovkova et al., 2019). The financial output calculation usually is defined by corporate profitability as calculated by an asset ratio (RP), a relation between gross income and total assets, an equity return (ROE), a compare of total revenues with total equity and net profit margin (NPM), and the residual proportion of sales after deductions from salt investments have been produced. In terms of financial perforce, Return on Asset (ROA) and Return on Equity (ROE) are commonly used. ROA illustrates how a bank uses its funds successfully to produce profits. It is the revenue produced by a percentage for each unit of an asset. The problem with ROA is to remove the amount of assets from the overall assets that are off balance sheet products. In the end, this condition will establish a positive prejudice under which the ROA in the estimation of bank output is overrated. Malik et al. (2016); Quarshie, (2020) claimed that in recent banking literature the ROA is one of the most significant profitability indicators. Study studies like Quarshie, (2020) and Malik et al. (2016) both took ROA as a rentability indicator. Return on equity (ROE) is known as the alternate profitability metric and is measured via the distribution of net profits by share. It tests each shareholder's fund unit 's profits. The shortcoming of this calculation is that heavily leveraged banks appear to achieve a higher ratio. However, no studies have examined these issues in an Islamic banking context.

### **3. The Relationship between Liquidity Factors, LRM and Financial Performance**

#### **3.1 The relationship between liquidity factors and financial performance**

Islam and Nishiyama (2016) established that liquidity factors has a positive impact onbut does not substantially affect the profitability of banks. According Chen et al. (2018),the results established that liquidity factors, as projected

through the financing gap, is fundamentally and contrarily connected with ROAA and ROAE. A higher financing gap (higher liquidity) reduces bank profitability as estimated by ROAA and ROAE.

According (Khidmat and Rehman, 2018) analysed the relationship between the liquidity factors, solvency and performance. Conclusions drawn were that liquidity factors affects ROA positively while it impacts negatively on solvency. Liquidity concerns may influence a bank's profits and resources which may contribute to the bankruptcy of a fund, which is otherwise soluble, in extraordinary circumstances (Central Bank of Barbados 2016). Based on the discussion, therefore hypothesis is suggested at below:

H1: (liquidity factors) have a significant and positive effect on financial performance

### ***3.2 The relationship between liquidity factors and liquidity risk management***

Banks (2014) claims that an uninterrupted attempt must be taken to ensure a compromise occurs between liquidity, profitability and risk to achieve successful liquidity control and profitability. Nabeel & Hussain (2017) supports this opinion, which argues that banks must create a trade-off between Risk, Return and Liquidity while managing assets and liabilities for the duration of volatility in cash flows, cost of funds and investment returns. A series of research on the ties between cash and bank efficiency were performed, but the reports were mixed up with some inconclusive ones. Some studies include: Olagunju, David and Samuel (2017) found a favourable and relevant association between liquidity and profitability, and concluded that the bi-directional interaction between these variables was found to have substantial liquidity and vice versa in terms of profitability in commercial banks. Based on the discussion, therefore hypothesis is suggested at below:

H2: (liquidity factors) have a significant and positive effect on liquidity risk management.

### ***3.3 The relationship between liquidity risk management and financial performance***

The lower leverage risk was justified by this negative relationship, as risk activities are put further under control, which reduces bank profitability (Sathyamoorthi et al., 2019). In fact, risk management reduces cost but does not

guarantee an increase in return on equity (Olamide, 2019). In recent studies, Zagarni and Hassouna (2018) recognized that prudential rules measured by solvency ratio and liquidity ratio improve the accounting performance of Tunisian banks. On the other hand, recent empirical contributions have provided evidence that the bank with the Chief Risk Officer (CRO) maintains a positive relationship with the bank's performance and shareholder value (Battaglia, Fiordelisi & Ricci, 2017). In the same vein, Fatemi and Folladi (2006) note that effective risk management leads to a more balanced trade-off between risk and reward, to achieve a better position in the future. The studies of Xiaodong (2011) and Zizhi (2012) found that there is a positive relationship between financial risk management practices and the financial performance of commercial banks. Based on the discussion, therefore hypothesis is suggested at below:

H3: (liquidity risk management) have a significant and positive effect on financial performance.

### ***3.4 The liquidity risk management as mediator between liquidity factors and financial performance***

Azrin and Hayati (2019) examined the mediating effects of Enterprise Risk Management (ERM) practices on risk culture and organizational performance in Malaysia among the 767 publicly listed companies in Malaysia across diverse industries, and for this reason, a number of senior managers in these companies dealt directly with Enterprise Risk Management. Lam (2008) chose ERM as the basis of his study believed to be an effective technique to administer risk and is fast becoming the best standard of practice. It is also seen as a mechanism that can oversee agency problems. This is because the idea of risk management serves as the mainstay to corporate governance and is linked with the organization internal control (Puan Yatim, 2009). He found a significant and positive relationship between risk culture and enterprise risk management and concluded that its effects on organizational performance existed. In another study, based on the discussion, therefore hypothesis is suggested at below:

H4: (liquidity risk management) has a moderating effect on the relationship between liquidity factors and financial performance.

**4. The Related theories of the research**

This hypothesis, which was formally formulated by the USA's Harold G. Moulton (1918), is the hypothesis that banks might defend themselves more efficiently from large withdrawals from deposits by keeping credit instruments as a liquidity reserve for which a ready secondary market exists. This principle frequently maintains that a bank has excellent reserves of liquidity for extremely marketable securities. These sources of liquidity are commercial paper, acceptances by prime bankers and bills for the treasury. Both of these devices in standard circumstances follow the marketability tests and due to their low maturity and capital assurance. Banks thus depend on reserves that can be passed to other banks to fulfil their cash needs before maturity (Summers, 1975). Shiftable, marketable and transferable reserves of a bank are also a foundation for growing liquidity (Ibe, 2013). Due to the reality that commercial banks are seeking to maintain sufficient funds to satisfy

the unforeseen demands of depositors (Maji, 2013), numerous scientists have questioned this hypothesis for the difficulties of turning credit instruments into cash in times of trouble as consumer trust will be severely impaired. Not only is the lack of many business prospects but also the high costs involved with the keeping of cash reserves limiting the commercial banks to retaining significant cash reserves. Islamic banks also ought to match the act with a feasible and feasible cash management model.

**5. The Research framework**

Centered on a number of existing effects studies liquidity factors on financial performance, Studies reveal promising outcomes and even bad findings. There are incoherence's. The occurrence in previous research and the varying outcomes liquidity factors, financial performance and liquidity risk management, provide a gap for this research to reexamine the effect of liquidity factors on financial performance. This study includes liquidity risk management as a mediating variable. This model was adapting from (Arif and Anees, 2012; Lubis et al. 2017; Zidan, 2020).

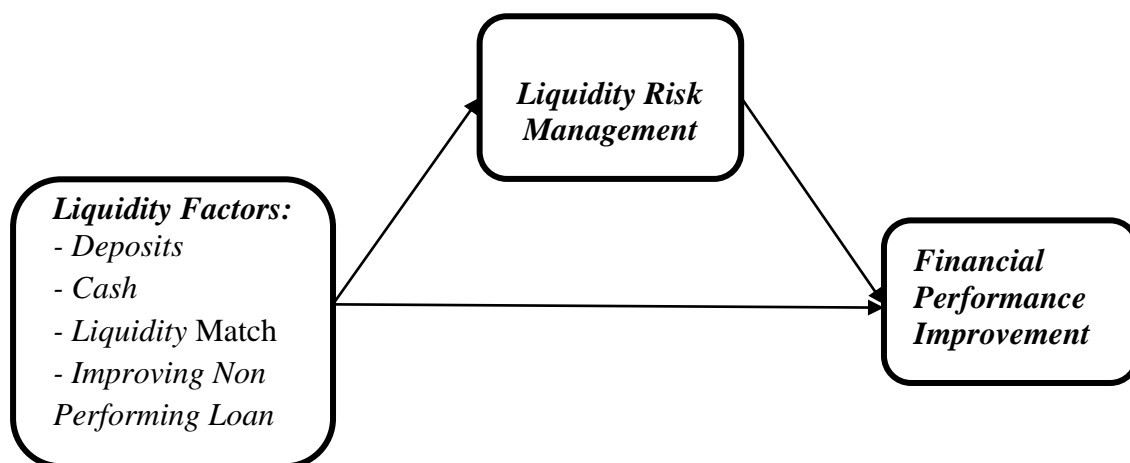


Figure 1. Research Framework

This scientific discussion and debate, along with the current observational proof, contributes to the following hypotheses:

**H1:** (liquidity factors) have a significant and positive effect on financial performance

**H2:** (liquidity factors) have a significant and positive effect on liquidity risk management

**H3:** (liquidity risk management) have a significant and positive effect on financial performance

**H4:** (liquidity risk management) has a moderator effect on the relationship between liquidity factors and financial performance.

## 6. Conclusion

Banks, like all other types of industry, face many risks. Liquidity risk is one of the main threats facing the banking sector; it is also a main cause of serious banking problems arising from weak policies and the management of such threats. The purpose of this research was to find out liquidity factors and liquidity risk management for financial performance improvement in the UAE Islamic banking system. Arising from the findings, it is evident that a liquidity factors has a positive impact on all the proxies of bank performance (returns on assets, returns on equity and net interest margin). This finding supports the findings of ElMassah et al., (2018); and ElMassah, (2015) in UAE. The study concludes that the financial performance of the banks in UAE can be improved by the establishment of sound and robust liquidity factors structure in place to ensure that adequate liquidity factors is maintained to meet matured and maturing obligations as they fall due. The conclusion that can be drawn about the liquidity factors for financial performance through liquidity risk management in the UAE Islamic. liquidity factors have a Significant negative effect on liquidity risk management. The rise in the current ratio would not inherently rise the bank's liquidity risk management. liquidity risk management greatly mediates the effects of liquidity factors on financial results. Increasing the current ratio and increasing return on equity can increase the valuation of the bank. The study therefore recommends that banks in UAE should establish a sound governance and risk management system such as asset liability management committees for liquidity factors, develop strategies and policies for the liquidity factors that is well integrated in the banks risk management practices.

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