THE FUNDING LIQUIDITY RISK AND BANK RISK: A REVIEW ON THE ISLAMIC AND CONVENTIONAL BANKS IN PAKISTAN

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The Prime objective of the current study is to discuss the link between the funding liquidity risk and bank risk for Islamic and conventional of Pakistan. The international financial system has been implemented in the banking system of Pakistan. Irrespective of some unique aspects of the market, significant influence has been received from the internal banking system. Two systems are being used in the banking sector of Pakistan, which includes Islamic banking and traditional banking system. The traditional system of banking involves interest on money. The depositor receives a specific amount over his/her deposits. However, the Islamic banking system is based on Shariah rules and policies. A major gap on liquidity research is that there is inconsistency in the relationship between funding liquidity risk and bank risk. This has resulted in different researchers giving conflicting views on the significance of various factors that influence liquidity risk or affected by the liquidty risk. The author has used the Scopus database to find the literature on the relationship between the funding liquidity risk and bank risk. The study is among the pioneer studies on the issues related to funding liquidity risk and liquidity risk, and will be helpful for the policy makers, bankers and practitioners.

Key words: *Funding liquidity risk; Liquidity Risk; policy-makers; practitioners.*

Introduction

Banking is the only sector in the economy where many risks are jointly managed (Chiaramonte, 2018). The very nature of banks is

managing numerous and seemingly opposing needs. They always provide liquidity to their depositors when they demand for by checking account, and they also extend credit and liquidity to borrowers by credit lines (Ghenimi et al., 2017). Due to these crucial roles played by banks, they are exposed and always concerned with liquidity and solvency. By tradition, capital is held by banks to serve as a safety measure in the case of insolvency, as well as held liquid assets (i.e. securities and cash) as a safety measures against unforeseen depositors' withdrawals or borrowers draw down (Bawa, & Basu, 2019). Liquidity risk (Henceforth LR) is regarded as the reliable tracker that leads to any austere market crisis; it is the ultimate fuse that carries the spark that explodes both credit and market risks and is the catalyst that often transmutes inaccessible loss measures to systemic contagious failures (Chen et al, 2018). Ahmad et al. (2019) noted that LR is the incapability of transacting at a reasonable price with proximity; it is regarded as the non-diversifiable systematic LR component. Furthermore, International Monetary Fund (IMF) (2008) contented that funding LR encompasses the incapability of a financial intermediary in servicing its liabilities when they due. It is regarded as the risk that occurs when the bank failed to immediately settle its liabilities at their due date (Drehmann & Nikolaou, 2013: Boudt et al., 2017).

Banks LR is commonly created when banks involve in investing long-term asset with short-term debt because a bank that is unable to overturn maturing debt may fail in spite of being solvent (Ratnovski, 2013). Rise in uncertainty over banks' solvency leads to major modern bank liquidity problem in some developed economies, which also played out a primary role in the general funding markets (Laeven et al., 2016). This prompts the objective of the renewed Basel III in using the Net-Stable-Funding-Ratio (a limitation on maturity disparity restricting refinancing volume falling due each date) and liquidity coverage ratio (requirement of liquidity) to solve the issue of LR in banks (Basel Committee, 2010).

Chen et al. (2018) further stressed that this unforeseen LR exposure can only be reduced through deposits transactions. Banks that have high degree of deposits transaction may not experience high risk despite their exposure on the asset side to undrawn their loan payments, while banks that have loan-LR exposure will experience high risk without high degree of deposits transaction. During tight markets periods, when funds move into banks from the securities markets the deposit-lending hedge becomes specifically powerful, as it helps the firm in funding a liquidity crisis.

The FLR is the ability to "settle obligations with immediacy" and it is also known as bank specific liquidity (Fall, & Viviani, 2016). Consequently, a bank is illiquid if it is unable to settle obligations in time. According to Khan et al. (2016) Dahir et al. (2018), the deposit ratio is considered as a proxy of firm's ability of funding its liquidity crisis. The inability to fund liquidity crisis or simply saying the funding LR has emerged as one of the significant risk in Pakistan countries (Rajan, & Narayana, 2017).

The liquidity creation is at heart of all the banking risk theories. During the course of recent decades, the bank liquidity is in limelight of banking literature (Dahir et al., 2018; Drehmann & Nikolaou, 2013). The liquidity management and associated risk have emerged as a focal point of regulatory reforms around the world (Dahir et al., 2019). Khan et al. (2017), claimed the inability of liquidity creation as one of the components of the banks risk and found that the when the firm's ability to fund the liquidity increases, the liquidity creation increases and the increase the bank risk. Nguyen (2017), argued that the commercial banks in the developing economies rely less on the interbank and hold more liquid asset, which make them more vulnerable to excessive risk taking in line with Nguyen (2017). It is argued that the excessive liquidity in the form of deposit to asset ratio encourage banks to take risk and ultimately increase the bank risk.

An overview of banking sector of Pakistan

Banking play a crucial financial intermediation role in the economic system of any country. Thus, banks have responsibility of providing fundamental services that include, but not limited to, acceptance and collection, as well as safe keeping of customers' funds, which the banks usually transferred or exchanged for financial or economic benefits of the customers on their instruction (Gomber et al., 2018). The bank's services facilitate economic activities as well as promote greater efficiency being intermediaries in meeting the investment and liquidity needs of the economic agents in the financial system. The diversified banking sector of Pakistan, which comprises of both the local as well as the foreign banks has undergone through a transitional phase with continues measure of deregulations and liberalizations. The prime objective of these measures was to stimulate the greater competition among the market players. Meanwhile, the measures were also objected to streamline the regulatory policies of banking sector in particular.

The market structure of Pakistan countries is highly concentrated (Basheer et al., 2019a). The financial sector of these countries is supervised and regulated by the multiple agencies; however, the central banks usually play major role in any banking reforms. Over the course of last twenty years, all the four banking markets are also undergone a series of regulatory reforms in terms of both the micro and macro prudential. However, the focus has been on the microprudential (Aikman et al., 2019).

The basic model in Islamic banking is the sharing of loss and profit that is not similar to the traditional banking system (Abd Rahman et al., 2014).

The operations mode for both Islamic and conventional system also differs. The principles, which are manmade, are implemented in conventional banks. However, Islamic principles or *Sharīʻah* laws are implemented in the Islamic banking system. The aim of both systems is same, which is the maximization of returns or profits. The *Sharīʻah* restriction is followed by Islamic banks. Interest is charged based on the compounding rate of interest by the conventional banks for lending money. The partnership principles are used by Islamic banks. Income is fixed for lending of money by the conventional bank, but profit and loss sharing concept is applied by Islamic bank. Interest is charged by conventional bank even loss is being experienced by the organization. Alternatively, the loss is shared by an Islamic bank based on the finance method used, i.e. Mushārakah or Muḍārabah.

The Islamic bank and conventional banks also differ in their concepts of money. The traditional banking system regards money as a product irrespective of the value storage and medium of exchange. A high price is charged for money than its face value (Basheer et al., 2018). Money can be rented as well in the traditional banking system. Alternatively, money is not regarded as a commodity rather is used as value storage and medium of exchange (Javed & Basheer, 2017). The price of money is same as its face value in Islamic banking. It is interesting to know that Zakat is paid by Islamic banks, but conventional banks do not pay.

Banking risk: an Islamic perspective

There is a difference in risk management in conventional and Islamic banking system. Risks are involved in some aspects of Islamic contracts. The contracts are based on shariah principles. The products/services offered by Islamic banks comply with Shariah laws (Ariffin et al.,2009;

Hassan & Hisham, 2020). The risk is based on the luck, which is referred as wager or a bet. However, human cannot deal with the risk and it is clearly based on luck. Risk can be defined as any action, which does not ensure about the outcome. It was defined by Elgari (2003) that respect and honor is defined by *Khaṭar*. It is also referred as over ruined supervision and bitterness. The actions, which lead to wager, are regarded as *Khaṭar*.

Khaṭar is similar to the English word risk in modern Arabic language. Islamic risk has been defined by Al-Zuhayly (1989) as the danger or hazard, which is not ensured in making an agreement. Risk has been regarded by Al-Suwailem (2006) as a damage perspective from the perspective of Islam. This risk is not desirable in the transactions of a business. The concept of risk is covered by *Gharar* that is related to the uncertainty in Islam. The exposure of risk determines its intensity or degree. Risk is regarded as chances of unexpected and undesirable outcomes that might be possible or impossible, advantageous or non-advantageous. Risk can be determined but it does not have much importance. However, it is not possible to measure uncertainty.

There is a significant difference in the concept of *Gharar* and risk (Hassan et al. 2019; Elgari, 2003). There is uncertainty involved in the transactions, which are based on contracts, in *Gharar*. As per *Sharīʻah*, the contract based on *Gharar* is considered invalid. Rules are same for risk other than higher risk. It is a natural thing that risk may occur, and it cannot be avoided in every situation. However, a special risk is taken by two parties in *Gharar* by making a specific agreement in the contract. It is risky to lend money to a rich individual based on *Murābaḥah* with no credit. It is not involved in *Gharar*. Alternatively, a product being sold on two prices is *Gharar*. One way is the option for paying cash, and the other is as per the convenience of customer that how much he can pay. It involves less risk but is invalid.

Based on the risk in Islamic, several schools of thoughts exist. These schools of thoughts differ according to the risk portrayed by various Fiqh and *Madhhab*. The following section involves discussion on *Gharar*, which is referred as uncertainty in Islam. The probability or risk in Arabic language is referred as *Gharar*. It refers to hazard, nevertheless, risk in business. Moreover, it can be regarded as holding something, which is without knowing the outcomes. Risk is taken without ensuring about the results. It may involve hasty decision making without being aware of the ultimate consequences. In Sahih Muslim, Gharar has been stated as an action, which may result in negative consequences or

outcomes. Therefore, according to Hadith and Islamic teachings, when a party tries to deceive the other party using unfair means and doubt is caused in contract negotiations, risk or *Gharar* is included in this. This may make the contract invalid (al-Hajjaj).

Muslims have been forbidden by Islam for being involved in gambling. This act results in a high degree of uncertainty or *Gharar* in a business relation, which is called *Mu'āmalāt*. It is forbidden to avoid abuses, abhorrence, and maintain harmony between the partners in the contract. Moreover, Mysir or Luck game is not allowed in Islam. Any task or activity, which results in gaining profit without making any effort, is forbidden in Islam. *Qimār* and Wager are prohibited in Islam because of non-productive activity resulting from gambling. However, these activities result in gaining profit at the expense of the second party.

يَسْأَلُونَكَ عَنِ الْخَمْرِ وَالْمَيْسِرِ قُلْ فِيهِمَا إِثْمٌ كَبِيرٌ وَمَنَافِعُ لِلنَّاسِ
وَإِثْمُهُمَآ أَكْبَرُ مِن نَّفْعِهِمَا وَيَسْأَلُونَكَ مَاذَا يُنفِقُونَ قُلِ الْعَفْوَ كَذَلِكَ
يُبيِّنُ اللهُ لَكُمُ الآيَاتِ لَعَلَّكُمْ تَتَفَكَّرُونَ

They ask thee concerning wine and gambling. Say: "In them is great sin, and some profit, for men; but the sin is greater than the profit." They ask thee how much they are to spend; Say: "What is beyond your needs." Thus doth Allah Make clear to you His Signs: In order that ye may consider. (Al-Qur'ān, II:219)

يا أَيُّهَا الَّذينَ آمَنوا إِنَّمَا الخَمرُ وَالمَيسِرُ وَالأَنصابُ وَالأَزلامُ رِجسٌ مِن عَمَلِ
الشَّيطانِ فَاجتَنِبوهُ لَعَلَّكُم تُفلِحونَ

O ye who believe! Strong drink and games of chance and idols and divining arrows are only an infamy of Satan's handiwork. Leave it aside in order that ye may succeed. (Al-Qur'ān, V:90)

إِنَّما يُريدُ الشَّيطانُ أَن يوقِعَ بَينَكُمُ العَداوَةَ وَالبَغضاءَ فِي الخَمرِ
وَالمَيسِرِ وَيَصُدَّكُم عَن ذِكرِ اللَّهِ وَعَنِ الصَّلاةِ — فَهَل أَنتُم مُنتَهونَ

Satan's plan is (but) to excite enmity and hatred between you, with intoxicants and gambling, and hinder you from the remembrance of Allah, and from prayer: will ye not then abstain? (Al-Qur'ān, V:91).

It was seen by Rasul Allah (ﷺ) that a camel was left untied by his Bedouin. The Bedouin was asked by Rasul Allah (ﷺ) that why you have

left the camel untied. The answer of the Bedouin was that I have strong trust on Allah Almighty. Then, it was replied by Rasul Allah (ﷺ) that you must tie your camel and then trust your Allah Almighty (narrated by at-Tirmidhi).

Guidance has been provided by Allah Almighty in Surah Yusuf for risk management. Hadith at Tirmidhi has also given guidelines for managing risk. First of all, there is a need for mitigating risk through diversification. Secondly, wealth should be protected by taking suitable and necessary measures for any expected loss. All such measures are in line with the principles of risk management, precautions, diversification, controlling and monitoring the process of risk management.

Liquidity in Islamic bank

It has become difficult to avoid *Fiqh al-Mu'āmalat* (Islamic law) in the current system of Islamic finance. If any business, bank, firm, or an individual aim at maximization of profits or revenue, this profit maximization must be in line with the teachings of *Sharī'ah*. The contracts must be made according to the guidelines of Islam and teachings of Rasul Allah (ﷺ). For instance, Riba has been forbidden as said by Allah S.W.T in His book.

{و أحــل هلــلا البيــع وحــزم الزبــا}

And Allah hath Permitted trade and forbidden usury. (Al-Qur'ān, II:275)

When Riba is avoided, the profit maximization does not involve any unethical practices. This enables the business to work on ethical principles in Islamic banking. An essential idea for interest elimination is included in Islamic banking and finance system. Regardless of eliminating risk, the trade and commerce activities in Islamic banking have not been identified as a similar ability of Riba (interest). Therefore, it is believed by several people that interest is not used by Islamic banks in their activities. The true thinking concept is involved in this, but it does not reflect the stand of an Islamic bank. It can be said that trading and commercial doctrine (البيــــع) is involved in Islamic banking and value addition (الكســـب) and risk taking (الغــزم) is involved in gaining profit. The concept of risk management has been defined by Hadīth and Qur'ān as below:

> "We had already, beforehand. Taken the covenant of Adam but he forgot: and we found on his part no resolve." (Surah Ṭa Ha: Verse: 115).

Means, a Man was born weak in nature and always liable to risk. So she has conceived him, and she withdrew with him to a remote place and the pains of childbirth drove her to the trunk of a palm tree (Surah Maryam Verses:22-23).

The issue of funding liquidity risk in Pakistan

The LR has emerged as a significant and continuous threat to the smooth functioning of modern times financial intermediaries thrift institutions (Aalbers, 2016). The aftermath of subprime crisis has made it realized to the financial institutions, that to avoid any crisis banks should maintain a safety buffer (Duffie, 2019). However, the level of safety buffer from both discretionary and compulsory (from regulators) perspectives is still an unresolved mystery. Brunnermeier, (2009) argued that, one of the reasons of subprime crisis of 2007-2009 is poor liquidity management. In an effort of providing support to their argument, they found that, LR through idiosyncratic channels could lead to bank failures. However, liquidity crisis does not only occur from because of low level of liquidity rather it can happen by excessive asset liquidity as according to Acharya and Naqvi (2012), the high liquidity level of assets can incline the banks to excessive risk taking which can also lead to bank failure. According to Basel III, it is mandatory for the bank to hold the minimum amount of liquid assets to avoid any crisis situation.

The liquidity position of banks in Pakistan is weak (Basheer et al., 2019) as it is evident from the figures below that the percentage of liquid assets to total assets has decreased significantly over the period of last five years (see figure 1).

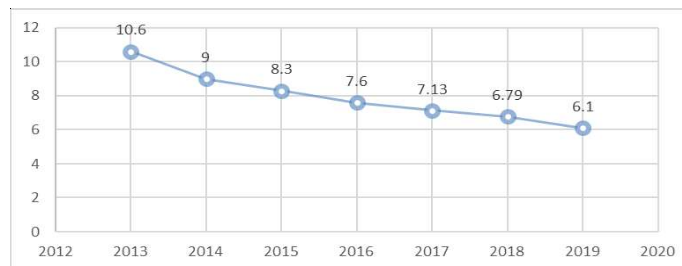

Fig 1:
Liquidity Ratio
Source: *Bank's Audited Accounts*

Bank explicit liquidity or FLR is very important in the setting of maturity conversion in the banking record, which consists typically of illiquid assets (VanHoose, 2017). Therefore, effective LR management supports banks to understand the requirements for cash flow. LR management is very vital because a liquidity short fall in a financial institution can have a multiplier consequence on the whole economy and predominantly on the bank risk.

The deposit to asset ratio has been argued as the proxy of the firm's ability to fund LR (Khan et al., 2017). In a critical situation, deposits provide shield against LR by increasing the ability of bank of funding its LR (Buch, & Goldberg, 2015). However, increasing deposit ratio reduces the market discipline which in turn accelerate the bank risk taking (Dahir et al., 2018; Hassan & Aziz, 2019). Meanwhile, it also triggers the moral hazard behavior as high deposit level, may incline banks to take excessive risk taking as someone else will be bearing loss. According to Drehmann and Nikolaou (2013), deposit insurance acts like a put option on the banks assets and defines funding LR as banks inability of settling their obligation. Thus, it can be argued that the lower deposit ratio increases the bank funding LR which in turn increases bank risk. The banking risk in Pakistan Banks is high (Basheer et al., 2019a), and the total deposit to total asset ratio which according to Khan et al. (2017) is the proxy of FLR has a significant impact on the bank risk-taking behavior. According to them the banks with excessive deposit take more risk which will lead them towards bank crisis.

In Pakistan, the funding LR ability of countries is not showing a single pattern. The deposit ratio indicates that the banks in Pakistan can face difficulties in managing their liquidity issues, and ultimately enhance the bank risk.

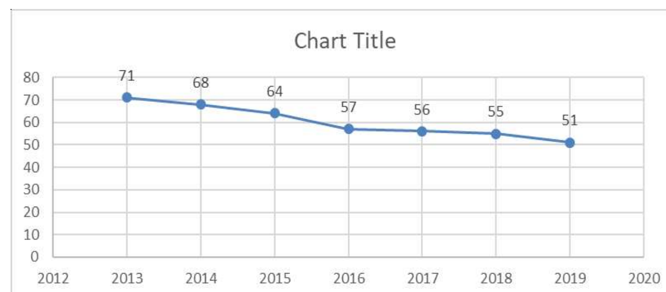

Fig 2:
Funding Liquidty
Source: Bank's Audited Accounts

Funding liquidity risk (FLR) and bank risk

Recent banking crises are major risk factors caused by the funding of LR (Drehmann & Nikolaou, 2013). To assist further comprehension, the terms of FLR, funding LR, liquidity creation and market liquidity are firstly defined. FLR refers to how easy it is for an institution to attain funding. It is also defined as the ability to obtain cash quickly. Funding LR on the other hand entails the institution's incapability of obtaining the needed amount of funding; LR is the incapability of financing cash outflows during certain periods. Funding LR affects balance sheet liability whilst LR entails balance sheet asset. Brunnermeier and Pedersen (2009) delineated between market liquidity and FLR and showed their correlation. Market liquidity entails the cost involved in selling assets. Market liquidity rises when assets can be sold quickly by an intermediary agent with approximate prices and low transaction costs.

Liquidity creation is a long-held concept which entails financing provision to the real economy. Through it, banks can create on and off-balance sheet liquidity which was theoretically suggested by Diamond and Dybvig (1983) after observing that the balance sheet asset of banks is inactive. It is theorized that liquidity creation is only possible via balance sheet liability. Liquidity creation allows for risk sharing between depositors and banks as they avert uncertainties with the depositors' preference for the consumption timing; in short, banks allow them to make simple investments with prearranged profits. The depositors are allowed to make withdrawals at any time.

Another theoretical argument suggests that liquidity creation is possible on both the balance sheet's sides i.e. asset and liquidity (Berger & Bouwman, 2009). Banks that are active have more ability to convert illiquid assets to liquid assets; hence, liquidity creation can be generated on the balance sheet asset. According to Umar and Sun (2016), studies on liquidity are largely qualitative save for theirs which had explicitly defined FLR, liquidity creation, and stock liquidity (or bank liquidity). The authors used the net stable funding ratio or NSFR (Netstable Funding Ratio) to represent FLR whilst stock liquidity serves as the representative of stock illiquidity. They also applied the equations model and the three-stage least-square estimations concurrently in examining 188 banks operating in BRICS (an acronym of Brazil, Russia, India, China and South Africa) between 2007 and 2014. The findings revealed that liquidity creation significantly and negatively affects FLR i.e. when liquidity creation

increases, FLR decreases. Meanwhile, FLR has no effect on liquidity creation. The findings also revealed that an increase in stock liquidity would negatively affect liquidity creation; in short, when stock illiquidity increases, liquidity creation increases as well. However, stock liquidity variation is not measurable by liquidity creation variation. That being said, stock liquidity has a direct effect on FLR, although stock liquidity can affect FLR via liquidity creation.

According to Khan et al. (2017), the Bank LR in the form of inability of the institutions in meeting liquidity requirements (funding LR), has played a key role in all banking crises and especially in the recent episode of global financial crisis which is known as the subprime crisis. Recently Dahir et al. (2018) also shown consistency with the Khan et al. (2017), argue that the LR offers a significant and constant threat to the smooth functioning and stability of financial institutions. Similarly, many notable prior researchers (Hong et al., 2014) argued that the LR is a significant determinant of bank overall risk. Drehmann and Nikolaou (2013), defined the funding LR is banks inability of settling obligation and measured it as bank's aggressive bidding at central bank to secure liquidity. They also found significant relationship between FLR and bank risk.

The level of FLR fluctuates over time; high liquidity levels may cause financial crises. Hong et al. (2014) stated that excess capacity from balance sheet growth can be utilized by having the financial intermediaries search for prospective borrowers including those that have no loan repayment capability which leads to higher levels of aggregate liquidity that in turn leads to financial crises. In his theoretical model, Imbierowicz and Rauch (2014) indicates that increased bank assets liquidity causes reduced banking stability only during financial crises and not during regular times. The summary of literature on the relationship between the FLR risk and bank risk is presented in the table 1 below.

Table 1. Summary of literature on the FLR risk and Bank risk.

Author	Title	Method	Findings
Dang et al., (2019)	"FLR and bank lending: Evidence from Vietnam"	Dynamic Panel data (System GMM)	"Panel data model shows that banks owning higher FLR measured

Author	Title	Method	Findings
			by higher ratios of deposit tend to lend more”
Dahir et al. (2019)	“Capital, FLR, and bank lending in emerging economies: An application of the LSDVC approach”	“Dynamic least squares dummy variable corrected (LSDVC)”	“The empirical results reveal that FLR is negative and significant, which suggests that higher FLR reduces bank loan growth.”
Vo (2018)	“The Role of Bank Funding Diversity: Evidence from Vietnam”	Panel Regression	“Banks with higher FLR tend to participate in more risk taking activities.”
Dahir et al. (2018)	“FLR risk and bank risk-taking in BRICS countries: An application of system GMM approach”	Dynamic Panel data (System GMM)	“The study also reveals that FLR risk has the substantial impact on bank risk-taking, suggesting lower FLR risk results in higher bank risk-taking.”
Rokhimand Min (2018)	“FLR and Risk-Taking Behavior in Southeast Asian Banks”	(Dynamic Panel data (System GMM)	“The study found that in contrast to developed countries, banks with lower LR indicated by higher deposit

Author	Title	Method	Findings
			ratios tend to take lower risks”
Khan et al. (2016)	“FLR and bank risk taking”	“Static Panel data (Fixed effect) Dynamic Panel data (System GMM)”	“They find evidence that banks having lower FLR risk as proxied by higher deposit ratios, take more risk between banks specific factors and bank risk”
Adusei (2015)	“The impact of bank size and funding risk on bank stability”	Panel data	“FLR is in positive relationship with the bank risk “
Acharya and Mora (2014)	“A Crisis of Banks as Liquidity Providers”	Panel data	“At the onset of the crisis, aggregate deposit inflows into banks weakened and their loantodeposit shortfalls widened.”

The author has used the Scopus database to find the literature on the relationship between the funding liquidity risk and bank risk. The above three studies are traced from the database. The three studies offer an inconclusive result as Khan et al. (2017) and Dahir et al. (2018) found that higher level of FLR encourage the excessive risk-taking behavior, whereas, Rokhim and Min (2018) has shown contradiction with their findings.

Following the study of Dahir et al. (2018), and Khan et al. (2016), the current study has employed the total deposits to total asset ratio as

a proxy of funding LR. It is been argued in the current study that the banks deposit ratio determines the bank risk taking behavior. To capture the overall banking risks, the current study has planned to use the bank z-score (Khan et al., 2016; Dahir et al., 2018), loan loss provisions (Khan et al., 2016) and its ability of liquidity creation. Many prior researchers (Khan et al., 2016) has argued the bank ability of liquidity creation as proxy of LRs. In particular, the current study has employed the measure of liquidity creation developed by Berger and Bouwman, (2009), and recently used by Khan et al., (2017). The Khan et al., (2017), found that the FLR is positive relationship with three types of risk mentioned above. Considering the importance of the relationship between liquidity creation and FLR, and between liquidity and CRR the following sections have shed light on them.

According to the Acharya and Naqvi (2012), the when banks encounter with the larger cash flow, consequently the lower FLR risk, the bank managers because of moral hazard behaviour lend at lower rate. They continued and argued that the reason behind lowering the lending rate is to increase the loan sale, which ultimately will enhance the compensation of management. According to the Chiaramonte, (2018) Banks only perform the costly audit, if the FLR risk is high, however, in case of lower FLR risk, mangers in most of the cases feel overconfident and go for the excessive risk taking.

Audits to determine managers' decisions about the standard of lending will only be performed if the banks' FLR deficit is highly substantial. Surplus deposits hence cause overconfidence among bank managers that their banks will not experience any looming FLR crisis and that their lending practices will remain unquestioned. Banks could experience capital shortage as a result of excess lending which in turn could lead to bank failure. Cheng et al. (2015) used the principal agent theory to indicate that risk-prone managers need greater levels of compensation to operate in precarious financial firms because they face higher wealth-related uncertainties. To achieve this, the managers may be provided with more freedom in pursuing aggressive lending schemes when there is excess liquidity.

There is a negative correlation between FLR risk and market liquidity (Drehmann & Nikolaou, 2013). Banks must maintain certain amounts of deposits with the central bank as liquidity reserve in the form of high-quality liquid assets. Over time, the level of FLR fluctuates and concerns are rampant that high liquidity levels can cause financial crisis. Adrian and Shin (2010) indicated that the utilization of surplus capacity arising

from balance sheet growth is enabled by the search for prospective borrowers by the financial intermediaries regardless of whether the borrowers can repay the loan; therefore, greater aggregate liquidity levels can lead to financial crisis. The theoretical model of the correlation between bank assets liquidity and banking stability developed by Bawa and Basu (2019) indicated that increased bank assets liquidity can lower banking stability during times of financial crisis, but not during normal courses. Liquidity increases can come from interest rate increases due to monetary policy changes. Cheng et al., (2015) suggested that banks assume more risks during when risk-free interest rates rise because there is higher investment in risk-free bonds, which escalates the interbank market's liquidity supply and drives more interbank lending. Other banks' investment in risky assets is also boosted by the increase in liquidity supply. Therefore, theoretical and empirical literatures propose the close correlation between FLR risk and bank risk taking. Our first hypothesis supports the prediction of Acharya and Naqvi (2012)

Conclusion

A major gap on liquidity research is that there is inconsistency in the relationship between funding LR and bank risk .This has resulted in different researchers giving conflicting views on the significance of various factors that influence LR or affected by the LR. Several studies have been carried out on funding liqiudity and risk management in conventional banks in many countries such as Khan et al. (2016) in USA, Dahir et al. (2017), and Dahir et al. (2019) on BRICS, Chen et al. (2018) on develkoped economeis. However. Till to date , in author knowledge little or attention has been given on the exploration of the impact of the funding LR on the bank risk in south Asian countris. As a group of researchers have argued that the excessiev LR can also enocurge bank to take excessiev risk which ultimateky enhances the bank risk (Adusei 2015: Dang et al., 2019: Vo, 2018; Khan et al., 2016). Whereas another group of reseracehrs argue a negative relationship between the funding liquity risk and bank risk (Dahir et al., 2017; Dahir et al., 2019: Rokhim & Min, 2018). Meawnhile, the extent of the research is very limited to some selected countries particularly in South Asian countries. Moreover, there is a general dearth of literature on funding LR compared to other risks (such as CRR). Hence, this research is significant in filling the gap and lay the foundation for extended study on management of risk in general and fundung LR and bank risk of south asian banks in particular for conventional bank.

The present study identifies relevant factors affecting liquidity and thus contribute to better LR management. In this aspect, the fund managers are made aware of risk management techniques to manage the factors influencing LR of their banks. Additionally, the focus on the funding LR was not pronounced until after the 2008 global financial crisis. Previously, CRR has been the priority of banking industry. Now, attention is on LR as against managing interest rates and CRR due to drying up of liquidity at the time of crisis . This increasing concern explains why liquidity is featured prominently in Basel III following the financial crisis.
On the basis of Islamic risk, there may exist many schools of thought. There is a difference in the thoughts based on interoperating of the risk by different Mudzhab and Fiqh. In this subsection, Gharar (Uncertainty) is discussed.

Moreover, it was said by Prophet Muhammad (ﷺ) that he was asked by someone whether he should leave his camel untied by trusting Allah or he must tie it and then leave the rest by trusting on Allah. The Prophet Muhammad (ﷺ) said that I would tie the camel and then trust Allah.

The above discussion is of key consideration and information, which could not be found in traditional knowledge. It can be said that everything involves the element of risk. This risk should be managed through compliance with Islamic teachings and trusting Allah SWT. The way in which risks were managed by Lady Maryam (A.S.) and Musa (A.S.) has been reflected by these verses. They managed their risks through the obedience of Allah SWT.

Based on the concept of risk in Islam, several schools of thought exist. These thoughts differ based on their strategies to deal with risks due to a difference in *Fiqh* and *Madhhab*. According to the Islam "*Gharar*" is also referred as risk or probability and in Arabic language that means risk, hazard and perils; nevertheless, in the terms of business it meant to take the hold of something without knowing or having no knowledge at all or to take risk oneself in a venture without a know-how of the exact results, or to make the hasty decisions by not calculating any hazard of the consequences.

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