
LITERARY PERSPECTIVE: LIQUIDITY RISK AND ITS MITIGATION IN ISLAMIC BANKS OF PAKISTAN

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Abstract

Liquidity is an important aspect of Pakistani Islamic banking system. In liquidity management system, depositors and Islamic bankers are involved. There are dual purpose of conducting this research. One is to analyze the liquidity behavior of depositors of Islamic banks of Pakistan. Second is to examine the Islamic bank's liquidity management system and organizational structure to identify the factors that influence liquidity of Islamic banks. The findings of the study indicate that both investment and deposit sides are managed whereby the deposit side is mostly managed by attracting more depositors. The theoretical implications are; firstly the concept of institutional deepening and restructuring of assets and liabilities side for liquidity management in Pakistani context and secondly the factors affecting liquidity risk will contribute in the existing literature i.e., factors relating to asset, liability and liquidity reserve models. The practical implications are that this study will help SBP to develop liquidity management framework including development of Islamic interbank market. In addition, practically Islamic Banking Institutions need to identify any future shortfalls in liquidity by constructing maturity ladders based on appropriate time bands so this study will provide different factors that affect the liquidity short falls like asset, liability and liquidity reserve model variables. Last but not the least, this study will help Islamic banking institutions that how to attract more customers by studying their intentions for investments

Keywords: *Islamic Banking, Liquidity Risk, Liquidity Reserves, Shariah Principles, Demand for Liquidity.*

JEL Classification: G21, G23, G33.

1- Introduction:

The Islamic banks have two told priorities, one is the to manage their liquidity second is to and mitigate their risk. Liquidity management process is such that the banks normally collect the money from the depositors and after retaining certain portion of that money, bank lends the money to the lenders for credit creation. Every business including banking & finance has to face and undergo certain risks. The major risks among all are financial, business and operational risks. The risk that can arise from the operational activities is considered as operational risk whereby business risks arise due to policies and procedures of competitors and the financial risk is the risk of default of organizations or bank or as the case may be. In case of banking business, the demand of money and deposit of money in balance create financial risk. If the financial risk is further categorized then it can be divided into credit, operational and liquidity risks.

The objective of this study is to analyze the liquidity behavior of depositors that create risk of liquidity shortfall and its mitigation techniques in Islamic banks of Pakistan.

The practical implications of this study will help SBP (State Bank of Pakistan) to develop liquidity management framework including development of Islamic interbank market. In addition practically IBIs need to identify any future shortfalls in liquidity by constructing maturity ladders based on appropriate time bands so this study will provide different factors that affect the liquidity short falls like asset, liability and liquidity reserve model variables. Furthermore, this study will help IBI that how to attract more customers by studying their intentions for investments.

The main problem is of liquidity mismatch, (Liquidity Risk) in Islamic banks of Pakistan. It is important to determine that what factors affect the liquidity mismatch, analyze the liquidity behavior of depositors, examine the Islamic banks' liquidity management system and mitigation of Liquidity Risk.

2- Islamic Banking Literary perspective of liquidity risk and its mitigation:

Liquidity risk management is one of the core challenging tasks for financial intermediaries such as banks. As banks are primarily responsible for providing liquidity in the financial system, managing the required liquidity position, and minimizing it, liquidity risk management is essential for daily operations. (Ahamed, 2021)

Banks and financial institutions not only help in circulation of money but also trade money between the savers and the businesses for the development of economy. The banks normally provide the financial services externally to the client and manage liquidity internally for operating smooth financial process. Moreover, there are two critical factors by which a bank can compete the financial market. The internal factor managing the liquidity means a balance between deposits and lenders. The money should be deposited and demand for the money should be balanced (Akkizidis and Khandewal, 2007). Liquidity management process is such that the banks normally collect the money from the depositors and after retaining certain portion of that money, bank lends the money to the lenders for credit creation. In liquidity management, there can be a risk that can be arose by attracting current accounts i.e. short-term funds from the deposits and investing the long-term proportions of money in investments with lenders, generally called as liquidity risk. Therefore, the banks have to make balance within the depositor's order to avoid the liquidity risk. Solvency of the banks is related with the liquidity of banks. To be

solvent or avoiding the liquidity risk, the bank can invest the money in more liquid financial institutions so that liquidity can be arranged in quicker span of time. The banks have to make sure that they have to pay their depositor timely if they want to refund their securities (Fiedler, 2000) and to seek balance between deposits and investments. The bank has to manage the assets & liabilities side of the balance sheet along with the maintenance of liquidity reserve liquidity management and risk control policies (Fiedler, 2000).

3- Islamic Banking & Liquidity risk management:

Liquidity is the ability of a financial intermediary or bank to keep a certain balance all the time by managing the inflows and outflows efficiently. Liquidity risk may generate from the mismatch between the demand and supply of funds. Banks collect funds in various deposits including credit repayments, short-term borrowing from the money market and the central bank. Customer withdrawals, credit facilities, and other expenses generate demand for funds. The gap between the supply and demands of the fund is known as net liquidity position. Banks must maintain this position carefully to avoid fund shortages and liquidity risk. (Ahamed, 2021). The Islamic banks have the top priority to manage their liquidity & mitigate the risk thereof. The liquidity profile and nature of banking risks are discussed here-under.

a. Risk in Islamic Banks:

Every business including banking & finance has to face and undergo certain risks. The major risks among all are financial, business and operational risks. The risk that can arise from the operational activities is considered as operational risk. While business risks arise due to policies & procedures of competitors. Lastly the financial risk is the risk of default of organizations or bank as the case may be. In case of banking business, the demand of money and deposit of

money in balance create financial risk. The financial risk can be further categorized into credit, operational and liquidity risk.

The risk is further defined by Howells and Bain (1999) in terms of returns i.e. the difference between expected and actual return. Furthermore, the different types of risks are not isolated. These are dependent upon one another, therefore, one cannot do exact classification of risks that exists at one point of time. This can be argued that one type of risk can boost up other types of risks if that one risk exists at one point of limit; hence, the risks are interdependent and associated with each other (Masood, 2020) for example the market and credit risk will be enhanced if the liquidity risk can arise in banking sector of country. The same assumption is applicable to other different risks as operational risks, liquidity and business risks. In the banking industry specifically in Islamic banking, the liquidity risk arises due to two situations i.e. the maturity mismatch and asset-liability imbalance. Maturity mismatch is a term that suggests depositors demand did not match with the supply of cash to the banks in long term advances whereas asset, liabilities imbalance is created when long term investments in assets does not match with short term liabilities i.e. current accounts.

Due to global marketing and financial innovations, the liquidity management issues are settling down through the banks which can rely more on the international money & Capital markets for more investments & current funding; therefore, it can be said that the dynamics of banking sector are now evolving for more competitive edge (Masood, 2020).

The European liquidity crises settled requirement of solid field management of liquidity for individual banks level and regulatory body. Derivatives markets also known as financial markets, where future contracts or options are settled down, require high level of liquidity management

because of slackened. Moreover the lender, who takes loan from bank on high rate of interest than usual rate, is another issue that should be pinned out in every possible way. For liquidity management, banking sector require appropriate coordination and cooperation of its various departments for dealing with banking regulation, policy makers, employees, management and general public. According to Chapra, (2008), these kinds of lenders need to improve financial market discipline. Furthermore, Greenbaum & Thakor (1997) defined most of banks face failure issue because of improper liquidity management especially in time of hostile situation. The bank can overcome failure, liquidity risk and its negative outcomes through liquidity management program.

Thus, banks should think about formation of a sound liquidity management program. This approach can balance the bank's Asset-Liability side of balance sheet. This approach can overcome losses of economy and thus government does not need to bailout package every time for liquidity problems.

Diversified understanding of the risk will help investors understood future prospects, cost of trade balance by different methods of investment (Samimi et al., 2021). Risk assessment is a mechanism through which investment decisions are determined, evaluated and consented or reduces uncertainty. In addition risk assessment the need for risk management arrives as an investor tries to identify the risk for investment losses, followed by reasonable efforts to investigate these possible risks on the financial results of a specific financial entity (i.e. bank) likely monetarily. This risk is calculated in relation to risk management (Mohammad nazar and Samimi 2020)

b. Essence of liquidity risk in banking sector:

Liquidity risk defined by Ismail (2010) is referred to the situation that banks are not able to meet the obligations of depositors and cannot invest into assets without of losses. It can also be defined as a situation when depositors of banks wholly ask for their money and this causes high level of demand supply gap, thus making banks struggle to be able to pay the demanded money in a very short time.(Hubbard, 1994). Besides this, bank also faces problem of liquidity risk when borrowers are not able to pay their responsibilities on time. Liquidity risk can also arise when depositors repay their deposits resulting in a liability side heavier than assets side. Lastly, liquidity risk arises in two different situations, firstly when banks decide to close loans and borrower is not able to pay back the money & secondly when depositors demand for their money back and banks are not able to pay back money to depositors (Thakor 1995).

In banking world, Board of Directors (BOD) works as an essential and crucial entity in formulating liquidity management policies which gives a pathway to banking organizations to follow. According to BIS (2008b), there are four basic aspects of liquidity management, being proposed by BIS for BOD to follow. These are understanding liquidity risk profile in relation to external and internal factors to decide risk tolerance level of the bank. Second, aspect is that BOD should formulate and assist execution of practices, policies and procedures for liquidity risk management in the bank. The third aspect is communication dispersal and counseling of senior managers to manage liquidity risk in a better way. Lastly, the fourth aspect guides that BOD should review benefits and loss of liquidity management while making new product approvals along with measurements and revision in pricing of product.

According to the Greenbaum and Thakor (1995), four elements should typically be examined, while designing and implementation of liquidity management policies, because there is much disparity in liquidity management policies of different banks. While designing and implementing of liquidity management policies, the first element is that there should be clear objectives, goals along with short term and long-term liquidity management strategies, Secondly, banks should clarify the responsibilities & role of authorities & bodies while implementing liquidity management policies. Specifically, features of policies should be foreground with regulators and financial institutions. Thirdly the banks and financial institutions face different types of issues like funding liquidity risk. market liquidity risk etc, for and monitoring, assessing and reporting such issues, policies should also propose tools to manage it. Finally, policies should organize plans which can be more effective if the ground realities, internal characteristics and external environment of the bank are kept in mind, for managing the liquidity risk of bank and financial institutions.

Liquidity risk management policies are managed by the Chief Executive Officers (CEO) and Risk Management Department of banks during time of planning liquidity management policies so the BOD should take opinion from these bodies. Meanwhile, various stakeholders, particularly regulatory authorities' recommendations, should also be integrated in policy structure. While designing design policies, such recommendations and interpersonal communications of BOD and other stakeholders should be implemented.

c. Asset Liability Committee(ALCO)

ALCO is regarded as the authority that implements the liquidity management policies that are framed by BOD. Liquidity management associated policies are framed by the BOD and these

policies are applied by ALCO to lower levels of banks. Basically, ALCO designs the frame work of liquidity management policies implementation strategies in cooperation with various committee like management committees of bank, business risk operational risk management committees etc.

Some of the functions of ALCO are discussed below.

- i. ALCO performs responsibility for managing & monitoring bank's liquidity management policies, so through performing this function it manages the assets and liabilities position; and interest rate risk with assurance by bank.
- ii. ALCO also finds the inequality between asset and liabilities, which can cause high risk for the banks in maintaining liquidity position while allocating of assets and liabilities.
- iii. Last but not the least, ALCO also takes part in experiential implication and reduces inequality between assets and liabilities of banks.

Stakeholders of banks authorize the ALCO to predict and manage the liquidity related issues and ALCO is also answerable to coordinate with stakeholders of banks. Along with performing all functions of liquidity management, ALCO cooperates with financial risk management committee and business risk management committee. Strategies are planned by ALCO senior management which are applied at operational level. Higher management, according to their hierarchy, implements the liquidity management policy with help of lower management.

These higher-level management (Managers) have following duties.

- i. To revolute the strategic policies and objectives that are linked to liquidity management and applied at operational level.

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- ii. To make sure the practices and operational correctness of liquidity management plans.
 - iii. To supervise the implemented policies and practices of liquidity management and to discuss with BOD for improvement of weaknesses.

d. Maturity mismatches and Asset Liabilities imbalances:

Liquidity risk has several reasons but two are the main. First one is ability discrepancy and second is inequality in asset and liabilities. Helmon et al. (1994) further defined the liquidity risk, that it can happen in two forms. The bank has higher liquid resources than their its predicted liabilities or those funds that are needed at assets side are more than expected funds vacant at liabilities side. This term is called liquidity gap and liquidity need. Liquidity risk can be cut down if these terms are pinned out and resolved. It can be knocked out by funding liquidity risk and that fund can be organized from depositors.

The most reasonable way to eliminate the liquidity risk is when assets side advances & liabilities side accountability meet both sides. Greenbaum & (Thakor) further defined it as maturity inequality risk predicted. Liquidity gap and liquidity need can manage and reduce risk of liquidity, when assets advance and liabilities accountability are balanced and funds meet demand & supply requirements from matured assets.

e. Determinants of maturity mismatch risks and asset- liabilities imbalance:

It is already stated that financial institution and banks can face problems of inequality in assets & liabilities side. Assets are held to meet the future liabilities, not adjusted in term of maturity time, as these problems are solved by liquidity management. Certain issues may occur in maturity mismatching and unbalancing of assets-liabilities. Firstly, this situation can occur due to

mishandling, difficulty in deciding the way for depositors of short term deposits or current accounts. Sharma (2004) further defined the mismatching and in unbalancing of liquidity is that banks do not invest funds in long term projects but are more focused on short term deposits because of more investment in current account, long term maturity mismatching and in unbalancing occur. If customer asks for short term deposits, liquidity issues can be faced by banks. Banks should give much focus on short term & current deposits for more profit & in unbalancing of liquidity instead of long-term deposits, in case if bank take more demand for liquidation of long-term investment along with inaccurate cost of liquidation. (Beakly and Cowan,2005),

Secondly, when banks motivate the depositors and corporate sectors to invest at high rates on advances which create high level of liquidity issues. This type of method may be good in some cases but when there is crisis enterprises are not in a position that they can pay interest and return loan. This situation affects the cash flow of bank due to which the interest is not collected and loan is not returned, and banks are not able to pay back to the depositors. In this kind of situation, banks can return money in the market if they can collect funds. But when banks fail in collecting funds they can face high level of liquidity risk and can collapse.

The third component that creates high level of liquidity risk is when corporate sectors, maintain their short term funds for long time in banks. For maintaining high level of cash the corporate sector they ask, for high amount from banks. Corporate sector's clients expect large amount in this regard and so banks face issues of liquidity.

The fourth component is defined by Greenbaum and Thakor (1995) in this way that some time unbalancing exists between stakeholders of banks including depositors, borrowers and regulators. The corporate sector clients have different requirements of funds in energetic environment; it is difficult to meet the requirements for banks for each of the clients. The role of bank is to invest money and for depositors is to deposit money in banks. It is difficult to handle the liquidity risk and balancing the assets and liabilities side because of informalized liquidity behavior.

The last factor that causes in unbalancing in assets and liabilities side is linked with business or natural fluctuation of economy (Zhu, 2001). In case of normal business cycle or when business is in unusual and extreme form of recession, the borrowers could not return the loan & interest to the banks. A bank faces difficulty in recovering funds and this situation causes inequality in assets & liabilities sides and thus it affects the liquidity position.

f. Outcomes of asset-liabilities and maturity mismatching:

Assets liabilities inequality and maturity mismatching do not merely create the liquidity risk, there but it can instigate other, risks in banks as well, There are three major types of risks which occur by assets-liabilities inequality and mismatching of maturity which include risk of insolvency, risk of reputation and risk of government control. Due to asset-liabilities inequality and maturity mismatching, some of the analysis is explained in the coming headings.

g. Insolvency / Collapse risk:

This kind of risk occurs when banks are not able to meet the financial responsibility. Insolvency risk increases for banks when these have limited resources and are not able to pay money to the

depositors. When bank is not able to keep the sufficient amount for paying to depositor, liquidity risk increases. When clients ask for cash and banks are not in position to liquidate the marketable securities and other liquid assets, then this situation creates liquidity risk and banks ultimately become insolvent. Furthermore, it is also concluded by Greenbaum & Thakor (1995) that insolvency risk increases, when assets of banks are less than their liabilities. In these kinds of circumstances, bank financial status becomes negative.

h. Respectability risk:

When depositors ask for money, banks are not able to pay their liabilities and cannot liquidate their assets then banks face liquidity risk and lose repute in front of its stakeholders, especially in the eyes of their depositors. In updated economic system, banks play a very important role in economic force. The economy of the country is damaged when depositors lose their trust from financial system.

i. Government control risk:

It is already discussed above that when banking sector faces the liquidity risk then whole economy suffers and financial structure is affected badly. To overcome this situation government gives relief to the banks that they can control the liquidity risk as example can be seen from Asian economy crisis of 1997 and global financial collapse of 2008-2009. In such type of critical situation of banks, government can control and perform responsibilities as lender that banks can go to and can overcome the risk and negative outcomes.

4- Mitigation of Liquidity Risk:

Above review acknowledge that reduction of liquidity risk plays a very important role for banks. By examining the assets liquidities gap, it is very easy to scan liquidity position of banks.

(Hefferman, 2001) a defined that this assets - liquidities gap is used to balance the assets & liability side for a period of time. It is usually stated that bank has to relent high return from investment in assets & maintain the costs as low as possible at liabilities side. Examining the gap for overall ratio, the study of ratio of total return from liabilities side to total cost of interest on deposit side, if the result shows negative balance then bank should:

- i. Increase the capital requirements.
- ii. Overcome the maturity mismatch risk and assets liabilities imbalance risk.
- iii. Banks should raise interest rates on credit.

If banks decide to select the option of increasing interest rates on credit, it would impact negatively on the bank portfolio. It can also increase the NPL's of bank. According to BIS, such banks should expand their funding sources and organize possible liability resources.

As it is already discussed that management of liquidity risk is an important task, liquidity has an important concern of bank, in daily operations, as banks need cash for obligations of depositor when depositors demand for money. In this situation, demand could be regular or irregular in nature. According to BIS, 2008(a), in regular business activities of customer, regular demand comes into notice but irregular demand can be expected or unexpected. When depositors demand for money from bank before maturity, the reasons can be to withdraw money for tax purpose, for unprofessional businesses etc. The unexpected irregular demand causes high level of negative change, like natural calamity, political unpredictability & financial crisis.

To overcome the crises, banks retain some provision to bear the irregular demand, It may be in form of funds, which can always be accessible for liquidity. According to BIS, 2008a, for the

purpose of liquidation, large banks need to retain large amount and & vice versa. Helmen et al. (1994) defined these pools of funds as:

- i. Foreign exchange: Foreign account depositors demand for money from banks to meet their obligations as banks retain the foreign currencies and surplus of currencies is transferred instantly to central banks.
- ii. Short-term investment made in form of central bank certificate & treasury bills.
- iii. Sudden need of money from banks, short term depositors retained in other banks to meet the demand on short notice, these depositors are more liquid than State banks security depositors.
- iv. Under collection cash shows amount, which is still not cleared or under process checks drawn on other bank's deposits with central and commercial banks.

Greenbaum and Thakor (1995) defined three different ways to address the regular demand for liquidity. The first way, is of such projects investments that can easily and quickly liquidated instead of keeping cash in hand. Second way to address regular demand is to focus on more investors, instead of expanding fund sources. Finally, to address the regular demand for funds from central bank in case of emergency.

Additionally, expected irregular demand can be addressed on the past experiences of banks. Banks can plan a needed liquidity workable plan that advises liquidity management. Furthermore, Helmen et al. (1994) defined that irregular demand can occur due to cyclical or seasonal trends. Certain banks can manage the irregular demand if there is not any other error or

changes on trends. In this aspect, bank could focus on depositors relationship and ask them to share their detail of withdraw to meet the demand on time. In this way banks will be able to make a proper flexible decision.

Liquidity demand analysis is most difficult in aspect of unexpected irregular liquidity demand. This type of demand can result in unexpected negative impact on economic and business conditions. To overcome this situation, banks deal in positive way and follow an intense approach, such as devising an emergency funding plan termed a Contingency Funding Plan (CFP). Banks could get detail from depositors to balancing the cash inflow and cash outflow to maintain the most liquid assets in larger amount, Banks could merge the structure and authorize a liquidity risk management department.

a. Devising a Contingency Funding Plan (CFP)

CFP is a proactive methodology that attempts to foresee the liquidity related issue that a bank faces, because of vulnerabilities in the outside condition. (BIS, 2006); (BIS, 2008a). CFP is formulated so that it guarantees prudential and productive administration of flighty unpredictable liquidity necessities considering both long haul & here and how situations. CFP in the initial step foresees vulnerabilities and related conditions that may make serious liquidity issues and after that relative liquidity needs & prerequisites are evaluated. Productivity & exactness of CFP relies on the structure, size of bank etc.

As indicated by BIS (2008b), CFP envisions liquidity pre-requisites in three different ways to start with quantitative as projections are made for new & monetary record assets and relative liquidity necessities. In this period of estimation, CFP distinguishes and positions all subsidizing sources as per their liquidity existences. Secondly, use of assets and potential well springs of

money streams are coordinated, where systems identify sources obligation offset are foreseen especially with reference to liquidity dissipation. Activities for example, utilizing rebate windows, arrangement identifying with early store money withdrawals valuing strategies for financing, liquidation of long-haul resources and auctioning off currency advertise securities are considered. In this stage, the ultimate pointers & setup are chosen & setup keeping in minds the end goal to alarm the administration on the landing of liquidity emergencies. Therefore, the administration of bank can be cautioned ahead of time and receive a stepwise way to deal with the liquidity emergency.

b. Matching Money Streams & Keeping up Flow reasons:

Under this methodology, bank coordinate money surges with money inflows by using an authoritative money inflow assentation or by offering resources. Further come procure borrowing & other repurchase understandings could likewise be used for trade age out the transient, (BIS 2006). More fluid resources are used late if liquidity request preserves. The elements of budgetary markets have changed after sometime and monetary exercises have turned out to be more continuous. In this situation along these lines, a precise estimation and investigations of future income prerequisites is very troublesome. In this way, banks need to incorporate client conduct projections alongside desire for stores. Banks could additionally make a complex utilizing demographically data on the respondents & using group investigation to foresee their liquidity conduct.

c. Liquidity and Financial Tools:

Procedure of liquidity management does not perform in isolation. Limitation of liquidity management tools & approaches pertain and some protection may be planned after implication to

maintain liquidity risk. Banks plan financial strategies to maintain liquidity risk upto an appropriate level. Changes in investment and different tenancy of investment help banks to manage liquidity risk. Further it was defined by Helmen et al. (1994) that investment funds decision in diverse financial instrument of varying maturities recline with following aspects:

- i. Well established liquidity management policies of bank.
- ii. Needs of liquidity investment of funds in view of need.
- iii. Nature & cost of financial instrument.
- iv. Elimination of loan costs for future periods.

Banks decide to discontinue or liquidate their financial instrument according to the need of liquidation and nature of financial instrument For example repeated demand of depositors can well evaluate the liquid assets. Requirement of on and off liquidity could be covered by time sensitive securities and long-term liquidity requirement could be satisfied by merging of short-term debt securities and long-term liquid assets. (Helmen ET al.1994).

Financial securities play a very important role and are considered means to solve expected & unexpected irregular demand. Liquidity expected irregular demand can be solved by borrowing on short term issue, whereas long term securities for short term liquidity demand. Short term security consists of banker's acceptance certificate of deposit, treasury bills and negotiable certificate of deposits. Short term securities could be easily liquidated and these provide diverse option to bank and are easy manageable. Finally, bank can effortlessly issue short term securities and borrow funds from other banks. More distant, unexpected irregular need of money from depositors for liquidity can be buying & selling resolved through four methods: firstly lending

from shareholders, secondly emergency funds from central banks, thirdly liquidity immunization from parent company and lastly government release.

Liquidity management can be solved through some different securities that are transferable cash deposits, like short term marketable securities. These securities can be easily liquidated by banks in money market. The securities that can be easily repurchased on fixed charges by banks, that are certificates of deposits. Bank's acceptance can also be liquidated by banks in secondary market. Bank's acceptance can be defined as the bank is responsible to pay certain amount on the behalf of instrument holder on future date. The instrument that can be liquidated & easily sold out in market for fulfillment of the demand is Treasury bill. Central bank issued T-bills that are taken up as risk free. Central bank certificates are also issued by central bank. Before maturity, T-bills can be reclaimed at discount. Finally, bank can select liquidation of deposits preserved with other banks. In the modern era, Subsidiary debt obligations, mortgage-backed securities are considered complicated instruments. These instruments cannot easily be liquidated because of unexpected cash-flow, are not tradable and are in complex assessment (BIS, 2008b) In this situation, the instruments that contemplate risk free, highly liquid and easily traded in local and international markets are government and central bank's certificates. These instruments can be easily sold out and liquidated to meet the obligation, in short span of time.

Another approach, bank can use to overcome money demand from depositors, is that it can issue their borrower its short term financial instrument without handling possession in money market for liquidation. Bank can also borrow from network banks and central banks. If the banks have good relationship with other banks then negative impression can be avoided.

If the above discussed approach could not be utilized by banks to manage the liquidity, then banks could request from external resources. External resources include shareholders; from whom banks could invite to invest money for short term. For utilizing this option, the problem that can occur is to manage & explain, the need for short-term borrowing from shareholders. The second option is that bank can opt to borrow money from parent company. In this option, bank will be liable to parent company. Funds can also be retained by banks in central banks in case of emergency. Last option that can be utilized by banks is to borrow from central bank, but the conditions of central bank are inflexible. The conditions that need to be fulfilled are collateral requirements, bank performance requirements and strict deferred payment requirements. Last option is government bailouts, which were observable in recent global financial crisis. Bailout, package, that was provided by US government to financial institutions, saved the depositors and economy of USA from falling down. Generally, this option takes up a major mechanism and it has a money negative impact; this negative impact can ruin the reputation.

5- Conclusion:

Comprehensively, banks face problems of liquidity risk which are maturity mismatch and asset-liabilities imbalance. To overcome the liquidity risk, banks should plan and follow the system approach by which banks should proceed with the establishment of liquidity management together with ALCO. Consequently, banks should also settle down the internal control instrument, as well as effectual information management system. Lastly, to maintain the liquidity risk, other approaches and devices are determined. In current banks the BOD's approaches and tools that are used for liquidity risk management are aligned with head of risk management department and members of ALCO. In this concern BOD is assigned with most top authority.

These policies are operational and functioned by senior management channels. In this period, during implementation of this process, internal control and effective information system support liquidity management. Finally, important factors that cause liquidity risk are bank demand for money to meet the obligations of depositors, both regular & irregular demand for liquidity, where irregular demand may be expected or unexpected.

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