

Impact of Loan Quality, Funding Management and Asset Quality on Liquidity Risk Management of Pakistani Banks

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Abstract

This research covers the prevailing liquidity risk management situation in Pakistani banking system keeping in view the comparison of Islamic and Conventional banks in operation in Pakistan. Four Islamic and five Conventional Banks were chosen as sample out of all banks working in the industry. The annual financial statements of these banks were the source of secondary data for thirteen years starting from 2004 to 2016.

Using co-relation, descriptive and multiple regression analysis, the results show that the Loan Quality and funding management has positive impact on Liquidity Risk management while Asset Quality has negative impact in case of Conventional Banking. For Islamic Banking, Asset Quality and Funding Management positively affect Liquidity Risk management while Loan Quality has negative impact on the same. Moreover the mean average value of financial ratios used as measuring tool for these variables show that performance of Islamic Banks is better than Conventional Banks operating in Pakistan. The research results will enable bankers, investors, academicians and policy makers to form a solid conception and make useful advances in their consideration regarding banking industry progress.

Key Words: Liquidity Risk Management, Islamic Banking, Pakistan

1. Introduction

The financial stability contributes to the economic progress of a nation and banks are the most dynamic source for financial wellbeing. The vitality of banking

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services sector increases for progressing countries like Pakistan where 59.2% of GDP consists of the services sector. It is pertinent to mention that for the year 2016, banking sector contributed 3.3% to the GDP which is a promising growth of around 6%. The Islamic banking is a fast growing industry in Pakistan growing at around 14% for the year 2016 in Pakistan. (The State Bank of Pakistan, 2016). Although Islamic finance industry is smaller in relation to the conventional banking industry, the total existing assets of \$2 trillion at the end of 2015 are expected to grow up to an estimated figure of \$3.5 trillion by 2021 which shows an enormous 75% growth. (Innovation in Islamic Liquidity Management 2017, Thomson Reuters). The liquidity risk management is the most sensitive function that a bank has to perform in terms of maintaining bank's stability and growth. With the growth of overall banking industry, the risk of liquidity always increases and banks have to carve out a new liquidity risk management strategy.

Tiwari (2009) derived that to avoid liquidity crisis, banks should maintain enough resources with regards to capital and liquidity for meeting their liabilities. The financing disbursed by a bank usually has longer maturity term in comparison to the deposited funds which are callable. Ali (2004) explained that the bank's exposure to liquidity risk increases as much as it uses the depositor's funds for loaning purposes but it has to match or transfer the maturities in order to mitigate the liquidity risk.

The assets and liabilities of the banks are to be efficiently allocated to enhance returns and strategic bank planning is the way to go through this process (Tektas, Nur Ozkan-Gunay, & Gunay, 2005). (Hanim Tafri, Abdul Rahman, & Omar, 2011) inferred that a balanced risk-return profile has to be managed by the bank in order to face and successfully compete a tough market competition and maximize shareholder's wealth.

This research work will give an in-depth insight into the present day liquidity management situation of conventional and Islamic banks. This will not only provide a clear picture to investors/ stakeholders regarding bank's risk management scenarios in terms of both conventional and Islamic banks but also envision the policy makers and top level management to develop a comprehensive strategic policy regarding liquidity risk management in Islamic banks.

2. Literature Review

In today's competitive banking industry environment, the process of risk management has become a corner stone of banks' efficiency and profitability. Banks always have been facing unique types of risks and most appropriate

mitigation is developing proper solutions through efficient risk management policies. Risk management is a process that looks forward to future regarding mitigation of risks and it includes an ongoing decision making process (Ayub, M. MA 2006).

Moore, Carter and Associates (2009) in coordination with Professor Andrew Kakabadse of Cranfield School of Management explained that banking crises can be avoided if the culture and ethics regarding risk management is improved in terms of governance and regulatory effectiveness. Khan & Ahmed (2001) surveyed 171 banks in Islamic banking industry to find out that along with other issues, the lack of availability of appropriate Islamic banking instruments is one of the major causes of inability to effective risk management.

2.1 Liquidity Risk

The liquidity risk is considered to be the major risk contributing to the bank failures so its management becomes absolutely vital. The main cause of failure of banks whether they are Islamic or conventional is facing difficulty in managing the liquidity related issues (Majid & Rais, 2003). (Iqbal, 2012) and (Rahman & Banna, 2016) opine that liquidity risk is positively affected by the return on equity, size, capital adequacy and return on assets in both Islamic and conventional banks.

In East Asia, a financial crisis took place in 1997 where the banks or the financial institutions were worst affected by the crisis (Gup & Kolari, 2005). According to Brown & Davis (2015), lessons should be learnt from subprime mortgage crisis of 2008, where high leverage, credit risk, liquidity and funding risk were the main reasons for the crisis, so that history may not be repeated.

In the year 1990, Zineldin opined that Islamic banks have superior liquidity management set up in comparison to conventional banks in Egypt and Malaysia and Islamic banks can replace the conventional banks as an alternate.

2.2 HQLA (High Quality Liquid Assets)

The HQLA are defined as those liquid assets that are not encumbered by any restrictions on transfer and converting them into cash can be very easy and immediate with very little or almost no loss of value even if traded under a stress scenario. These assets should also fulfill the criteria of having qualities like low risk, low volatility and easy valuation. The categorization of these assets can be made into two levels which are level-1 and level-2 under Basel -III. The level 1 assets are highly liquid assets which do not need any hair cut or supposed

reduction in value to avoid liquidity risk. The level 2 assets include 2-A and 2-B categories which both need hair cut up to a value of 15% and 25% respectively (GN-6, www.ifsb.org).

Giordana & Schumacher (2017) explained that HQLA are most importantly used to calculate LCR (Liquidity Coverage Ratio) and used as numerator in LCR calculation formula whereas the expected net cash flow for thirty days is used as denominator and this calculation is made under acute liquidity stress scenario for banks.

2.3 Loan Quality

Loan Quality (LQ) is considered to be one of the vital variables that affect the bank's liquidity risk management. Abiola & Olausi (2014) opined that two major causes of bank's failure are poor asset quality and low levels of liquidity in banks. Sanusi (2002) highlights the human resource angle of poor liquidity management that banks over-recruited the human resource and this created many problems along with financial crimes, poor credit appraisal system, and poor asset quality so the number of distressed banks increased.

According to Nkusu (2011) inflation also has an impact on loan quality. Having considered the economic factors, the effect can be ambiguous and can have negative or positive relation with NPL portfolio. It is understood that the poor loan quality contributes to the failure of the bank.

Shehzad & De Haan (2013) inferred that ownership concentration has a significant effect on variables of loan quality and bank capitalization. Kopecky & VanHoose (2006) explained that regulatory authorities can help in improvement of loan quality by enhancing capital requirement of operations.

2.4 Funding Management

The banks have to generate sufficient funding through various liability sources in order to develop assets and protect their investments in the banking industry. There are different elements that affect the bank's lending rates and one of them is the cost of funding, and it is used for raising different liabilities so it is a function of composition of liabilities. Besides that, the bank also has to consider several other risks like Credit risk which pertains to loans and liquidity risk which involve funding long term assets with short term deposits or liabilities (Reserve Bank of Australia Bulletin, March 2012).

Furthermore, an additional source of liquidity or funding for bank is securitization which makes bank's lending less sensitive and reduces the risk of shocks in terms of cost of funds (Loutskina & Strahan, 2010). Fiedler, Gassmann, & Wackerbeck (2011) in their report "Managing liquidity in a new regulatory Era" explain that funding was little cheap and easily available to fund new businesses before liquidity crisis 2007-08 which is not the scenario now. The banks now do not freely support new businesses with their funds and significant brakes have been applied to the process. Not only the regulators but also the investors, business partners, rating agencies are forcing the banks to adopt to and develop new policies according to new era of banking after crises.

2.5 Asset Quality

The asset quality has always been the area of concern for banks and continuous efforts are made by the banks to enhance asset quality through different means. Ongore & Kusa (2013) explain that Kenyan banks' profitability related significantly to asset quality, capital adequacy and management efficiency, whereas it is also pertinent to mention that relation is not significant in case of ownership.

Doğan (2013) explained through a comparative study by using financial ratios for comparing financial performance of Turkish local banks and foreign banks working in Turkey. It was explored that ratios like total assets, management effectiveness, ROE and asset quality of local Turkish banks is superior to foreign banks. Agoraki, Delis, & Pasiouras (2011) and previously Gaganis, Pasiouras, & Zopounidis (2006) contend that market structure, asset quality and capitalization are the indicators which give more useful information regarding banking risk as compared to efficiency, profitability, and management qualities.

3. Research Question/Hypothesis

The variables of loan quality, asset quality and funding management is said to have impact on liquidity risk management which has to be seen in this research study in the scenario of a comparison of Pakistan Islamic Banks and Conventional Banks. In this regard, following hypothesis has been developed to be tested here;

H₁: The performance of Conventional Bank is better in comparison to the Islamic Banks regarding their Liquidity risk management practices

H₂: A positive relationship exists among the bank loan quality, funding, assets quality and the Liquidity risk management in terms of comparison of Islamic and Conventional banks in Pakistan.

4. Research Methodology

This study explores the comparative relationship of Islamic and conventional banks in terms of Liquidity risk management through independent variables of asset quality, loan quality and funding management. The data has been collected from annual financial accounts of 5 conventional and 4 Islamic banks as a sample for last thirteen years (2004 to 2016) out of commercial banking industry in Pakistan. The analysis has been carried out using Regression, Co-relation and descriptive analysis.

The hypothesis developed above will be tested through following equation which include Liquidity risk management as dependent variable and the loan quality, asset quality and funding management as independent variables.

Table 1: List of Selected Banks

Conventional Banks		Islamic Banks	
Sr. No.	Bank Name	Sr. No.	Bank Name
1	Allied Bank Limited	1	Meezan Bank Limited
2	Habib Bank Limited	2	Al-Barka Bank Limited
3	Al-Falah Bank Limited	3	Dubai Islamic Bank Limited
4	United Bank Limited	4	Bank Islami Pakistan Limited
5	MCB Bank Limited		

$$LM = \alpha + LQal\beta_1 + FMan\beta_2 + AQal\beta_3 + \varepsilon$$

The variables in the equation are explained hereunder:

Independent Variables

LQal = Bank Loan Quality

FMan = Bank Funding Management

AQal = Bank Asset Quality

ε = Estimation error

Dependent Variables

LM = Liquidity Risk Management

Measurement of Independent Variables

The variables will be measured through the use of financial ratios which have been defined below:

4.1 Bank Loan Quality

The Loan Quality has been measured using following ratios;

- ♦ **Growth of Total Assets (E1)**

The continuous growth of total assets is the primary source of bank's earning and profitability. It can be adjudged through various financial accounts published by the bank. The cash & coins, interbank lending, investments, advances etc. are all bank's sensitive assets.

- ♦ **Growth of Gross Loans (E)**

The loan growth strategies always include looking for quality borrower who can generate such cash flow to meet their short term and long term obligations. The prevailing economic situation plays a vital role in the growth of loans and avoiding NPL. The economic cycle boom or depression also plays its part in developing loan portfolio and maintaining its quality.

- ♦ **Non-Performing Loans (Impaired Loans)/Gross Loans (E3)**

The quality of loan can also be measured through the amount of NPL out of the total loan portfolio of a bank. The State Bank of Pakistan has defined criteria in prudential regulation for credit portfolio regarding its classification that is Sub Standard (90 days), doubtful (180days) and loss (365 days) Categories.

- ♦ **Reserve for NPL/Gross Loans (E4)**

Every bank keeps a reserve for NPL where it maintains provision amounts with a specific proportion of overall NPL portfolio categories. Comparing this with gross loans gives us a picture of loan quality.

- ♦ **Reserve for NPL (Impaired Loans) /Impaired Loans (E5)**

If the NPL reserve amount is compared with overall NPL amount, it also gives us a good picture of loan quality keeping in view the reserve category.

- ♦ **Impaired Loans less Reserve for Impaired Loans/Equity (E6)**

The reserve amount compared to equity tells us how much burden of NPL is on the equity of the bank subtracting already kept provision for NPL for true picture of loan quality.

- ♦ **Loan Impairment Charges/Average Gross Loans (E7)**

The bank's income is also harmed by impairment charges of NPL and reduction in income due to NPL shows bad loan quality.

- ♦ **Net Charge-off/Average Gross Loan (E8)**

The net amount NPL provisioning charged to gross loan figure and subtracting the recoveries or adjustments for the current year gives us a comprehensive net charge off figure and comparing it with gross loans will give us loan quality scenario of the bank.

4.2 Bank's Funding Management

The independent variable Bank's Funding Quality is measured by using the following ratios;

- ◆ **Loans/Customer Deposit (E9)**
The funding sources have always been crucial for banks and one of them is deposit base of the bank. If we have good funding base in terms of deposit to give loans further, it is a healthy sign.
- ◆ **Inter-bank Assets/Inter-bank Liabilities (E10)**
The interbank assets are the lending that banks have made in the interbank market for short term and interbank liabilities are money market borrowings. Their relation shows that the bank has sufficient funds in case of increase in assets and running short of funds in case of excessive liabilities.

4.3 Bank Asset Quality

Following ratios are used for measuring asset quality;

- ◆ **Loan Loss Reserve/ Gross Loans (E11)**
Loan loss reserve shows the NPL weightage in credit portfolio and comparing it with gross loans will help identifying bank's asset quality in terms of advances.
- ◆ **Loan Loss Provision/Net Interest Revenue (E12)**
The interest revenue is generated through bank's core operation of lending and the amount of loan loss provision compared with interest revenue tells us how much pressure is on interest revenue generation in terms of NPL.
- ◆ **Loan Loss Reserve /Impaired Loan (E13)**
The ratio compares the loan loss reserve to total impaired loan as to how much provisioning of different NPL categories have been made for different loans and recoveries thereof.
- ◆ **Impaired Loans /Gross Loans (E14)**
This is a comparison of total loans to NPL showing over all position of the credit portfolio of the bank.
- ◆ **Net Charge-off/Average Gross Loans (E15)**
The net charge-off figure consists of the amount of Gross Loans charged off in accordance with bad debt expense less the recoveries made to similar charge-off belonging to the previous period. It gives a clear picture of the bank asset quality.
- ◆ **Net Charge-off/Net Income before Loan Loss Provision (E16)**
Provision of loan losses also affects net income and deteriorating position of NPL can damage the net income badly.

- ♦ **Impaired Loans /Equity (E17)**

The ratio explores the relationship of NPL to the equity. If the ratio is lower, the bank's asset quality management will look better.

- ♦ **Unreserved Impaired Loans/Equity (E18)**

The unreserved loan are those for which NPL provisioning is not required or hasn't yet been booked. So their relation with equity will help understanding the asset quality of the bank.

Dependent Variable

4.4 Bank's Liquidity Risk Management

The dependent variable of our equation is liquidity risk management and it is measured by the following ratios:

- ♦ **Inter Bank Ratio (E19)**

This ratio shows the interbank money market position of the bank. The excessive borrowing shows that the bank is short on funds and liquidity. The strong lending position shows that the bank has good funding position.

- ♦ **Net Loans/Total Assets (E20)**

This relation shows how much of the bank assets consist of healthy loans. The more the credit portfolio is developed and healthy, the more the bank liquidity rises.

- ♦ **Net Loans/Deposit & Short Term Funding (E21)**

The bank credit portfolio is supported by deposits and short term funding through different sources and a good proportion of both with loans gives us a clear comprehension of liquidity position of the bank.

- ♦ **Net Loans/Total Deposits & Borrowings (E22)**

This relation of deposit and borrowing funding base and net loans shows that bank should lend keeping in view the funding sources. The higher the ratio, the more chances are of liquidity crunch as the loan disbursement goes over the limit of funding base. The lower the ratio, the better the liquidity will be.

- ♦ **Liquid Assets/Deposit & Short Term Funding (E23)**

The asset portfolio is developed on the basis of funding sources. The ratio of liquid assets to deposit and short term funding gives us the liquidity position of the bank and lower ratio is better in this case.

- ♦ **Liquid Assets/Deposit & Borrowings (E24)**

The liquid assets developed by the bank through funding sources like deposit and borrowings show how much bank can generate liquidity in crunch time to pay back its liabilities in case of liquidity shock.

5. Analysis and Discussion

To analyze the study in depth for Islamic banking and conventional banking with respect to liquidity risk management in Pakistan, the correlation analysis, descriptive analysis and regression analysis are used. There are three independent variables named “Loan Quality”, “Funding Management”, “Asset Quality” and dependent variable named “Liquidity Risk Management” are measured on the basis of various ratios mentioned in the previous section. These ratios are calculated on the basis of values extracted from the annual financial statements from 2004 to 2016. The analysis is described in detail below:

5.1 Correlation Analysis

The correlation matrices are given in Table 2 and Table 3 for both the Islamic banking and conventional banking. The value of correlation varies between -1 to +1. Correlation value 1 shows that the variable is highly correlated with the other variable and moves in the same direction as the other variable. On the contrary, the correlation value of -1 describes that the variables are highly correlated with each other but move in the opposite direction. But the value ‘0’ shows that there is no correlation among the variables. The coefficients of correlations also depict the multicollinearity among the variables.

The researchers observed from the given correlation matrix in table 2 that all independent variables in the model have a positive correlation with the dependent variable “Liquidity Risk Management” in case of conventional banking in Pakistan. While on the other hand, it is observed in table 3 that all independent variables LQ, FM and AQ are also positively correlated with the dependent variable LRM in case of Islamic banking in Pakistan. The correlation between LQ and FM is observed negative.

Table 2: Pearson Correlations- Conventional Banks

	Loan Quality	Funding Management	Asset Quality	Liquidity Risk Management
Loan Quality	1	.390**	.389**	.467**
Funding Management		1	.213	.653**
Asset Quality			1	.072
Liquidity Risk Management				1

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3: Pearson Correlations- Islamic Banks

	Loan Quality	Funding Management	Asset Quality	Liquidity Risk Management
Loan Quality	1	-.040	.012	.102
Funding Management		1	.553**	.801**
AssetQuality			1	.146
Liquidity Risk Management				1

** Correlation is significant at the 0.01 level (2-tailed).

Table 4: Descriptive Analysis of Conventional Bank Vs Islamic Banks- Loan Quality

Variables	Conventional		Islamic		Mean Difference
	Mean	S.D	Mean	S.D	
E1	0.151	0.116	0.596	1.732	0.445
E2	0.115	0.150	0.390	0.429	0.276
E3	0.088	0.037	0.059	0.050	0.029
E4	0.066	0.030	0.037	0.030	0.029
E5	0.785	0.252	0.748	0.456	0.037
E6	0.159	0.285	0.123	0.148	0.036
E7	0.011	0.012	0.007	0.011	0.004
E8	0.002	0.009	-0.081	0.519	0.083
Averages	0.172		0.235		0.06*

* Islamic Banking performs better in terms of *Loan Quality*

5.2 Descriptive Analysis

The descriptive analysis further enhances the understandability of the performance of conventional banks and Islamic banks retrieved from the annual financial statements of the included banks for thirteen consecutive years from 2004 to 2016. The eight ratios of 'loan quality', two ratios of 'funding management', eight ratios of 'asset quality' and three ratios of 'liquidity risk management' have been calculated in order to evaluate conventional banks and

Islamic banks. For the purpose of descriptive analysis, the mean values and standard deviation are calculated against each of the ratios and mean differences are taken to understand the true picture of the scenario. Then the average of all mean averages is obtained the overall position of both of the banking systems.

Table 4 exhibits the descriptive analysis of the independent variable 'loan quality'. The major source of earnings of banks is the financing activity which is based on the deposit level of the banks. The banks' function is to transform short term and long term deposits into short term financing and long term financing. As long term loans are highly risky, they are charged more compared to short term financing and it is an authentic source of earnings. Table 4 exhibits the average mean of 'loan quality' ratios for conventional banks which is 0.172 and for Islamic banks as 0.235 which shows that Islamic banks are performing better than their counterparts. There are numerous reasons for better 'loan quality' in Islamic banks. It could be the vigilant selection of borrowers and conservative selection of industry to finance as Islamic banking is more risk averse. Islamic banking is asset based interest free banking and discourages the interest based activities. Islamic banking always prefers to facilitate the entities looking for interest free activities. Table 5 shows the comparison of Islamic and conventional Banks in terms of independent variable "Funding Management". Here the Islamic banks show a better mean average of 1.500 depicting their performance in terms of funding sources management and development is better than conventional banks 0.347, thus reducing the risk of liquidity problems.

Table 5: Descriptive Analysis of Conventional Bank Vs Islamic Banks- Funding

Variables	Conventional		Islamic		Mean Difference
	Mean	S.D	Mean	S.D	
E9					
E10	2.153	2.023	11.272		
Averages	0.347				1.1**

** Islamic Banking performs better in terms of *Funding Management*

Table 6 presents the asset quality situation of both type of banks. The average mean value of 1.718 of Islamic banks is better than conventional bank's value of 0.239. This shows that Islamic banks are developing assets which are of better quality and are more liquid.

Table 6: Descriptive Analysis of Conventional Bank Vs Islamic Banks- Asset Quality

Variables	Conventional		Islamic		Mean Difference
	Mean	S.D	Mean	S.D	
E11	0.066	0.030	0.037	0.030	0.029
E12	0.169	0.359	0.126	0.295	0.043
E13	0.785	0.252	0.748	0.456	0.037
E14	0.088	0.037	0.059	0.050	0.029
E15	0.002	0.009	(0.081)	0.519	0.083
E16	0.064	0.165	12.363	91.772	12.299
E17	0.574	0.361	0.373	0.341	0.201
E18	0.167	0.271	0.121	0.149	0.045
Averages	0.239		1.718		1.48***

*** Islamic Banking performs better in terms of *Asset Quality*

Table 7 describes the liquidity risk management position of both banks, Islamic banks here also show better performance in terms of liquidity management showing a higher value 2.045 as compared to conventional bank value of 0.739. This shows a better liquidity position of Islamic banks. This table also shows the grand average of all the variables. Descriptive results and Islamic banks are also found to be better in terms of overall grand average mean value of 1.607 as compared to conventional banks' value of 0.394. This descriptive analysis shows that Islamic banks are ahead in terms of liquidity risk management and its related elements and are performing better than conventional banks.

Table 7: Descriptive Analysis of Conventional Bank Vs Islamic Banks- Liquidity Risk Management

Variables	Conventional		Islamic		Mean Difference
	Mean	S.D	Mean	S.D	
E19	.4614	.72021	4.1724	5.28257	3.711
E20	.7841	.05210	.9375	1.15872	0.153
E21	.9700	.43886	1.0242	.89685	0.054
Averages	0.739		2.045		1.306****
Grand Averages	0.394		1.607		1.213*****

**** Islamic Banking performs better in terms of *Liquidity Risk Management*

***** On Average, Islamic Banks in Pakistan perform better than Conventional Banks

5.3 Regression Analysis

The table 8 shows the results of regression model I (conventional banks) while table 9 shows the results of regression model II (Islamic banks). 'Loan quality' and 'funding management' are significant and have a positive relationship with the dependent variable 'liquidity risk management'. No auto-correlation exists in model I of conventional banks as 'Durbin Watson' pertain the value of 1.813. The value of 'Durbin Watson' test should not be less than 1 or more than 3 to show no auto-correlation exist between variables in the model (Field, 2009). The value of *r*-squared is 50.4 % for conventional banks. This shows the percentage changes reflected in our model caused by 'loan quality', 'funding management' and 'asset quality' in dependent variable 'liquidity risk management'. It is also exhibited that 'loan quality' and 'funding management' have a significant positive influence on 'liquidity risk management' in case of conventional banks. Moreover, the independent variable 'asset quality' has a negative influence on 'liquidity risk management' so conventional banks should consider the quality of asset portfolio including all the assets of Cash and coins, interbank lending, investments, advances, etc.

Table 9 depicts the results of 'Islamic banks' regression model II. All Independent variables have significant relation with LRM in case of 'Islamic banks' where 'loan quality' and 'funding management' are positively significant while 'asset quality' have an inverse relation with LRM. The value of *r*-squared is 79.1 % for Islamic banks. This shows the percentage change reflected in our model caused by 'loan quality', 'funding management' and 'asset quality' in dependent variable 'liquidity

risk management'. Durbin Watson test value of 1.707 shows that there is no auto-correlation among the variables of the regression model-II.

Table 8: Regression Model I Results- Conventional Banks

	Standardized coefficients Beta	t	Sig.
Constant		2.833	.007
Loan Quality	.312	2.768	.008
Funding Management	.568	5.342	.000
Asset Quality	-.170	-	.116
Dependent Variable: Liquidity Risk Management			
<i>R-Squared</i>			0.504
<i>Adjusted R-Squared</i>			0.476
<i>Durbin-Watson</i>			1.813
<i>F- Statistics</i>			17.63
Over-all Model Sig.			0.000

Table 9: Regression Model II Results- Islamic Banks

	Standardized coefficients Beta	t	Sig.
Constant		2.432	.020
Loan Quality	.149	1.980	.055
Funding Management	1.047	11.588	.000
Asset Quality	-.435	-4.819	.000
Dependent Variable: Liquidity Risk Management			
<i>R-Squared</i>			0.791
<i>Adjusted R-Squared</i>			0.774
<i>Durbin-Watson</i>			1.707
<i>F- Statistics</i>			46.60
Over-all Model Sig.			0.000

6. Conclusion

The findings of our research depict that Liquidity risk is one of the most important risks that a bank has to manage in order to efficiently execute its core operations and developing sound assets base and profitability. Our model reveals that independent variables of Loan Quality, Asset Quality and funding management have relation with liquidity risk management in both Islamic and conventional banks and studying these independent variables in relation to LRM will improve risk management policies pertaining to LRM.

As per the descriptive analysis, the Islamic banks show a better performance in terms of impact of loan quality, asset quality and funding management on LRM. The grand mean average value of descriptive analysis places Islamic banks far ahead of conventional banks. It is also pertinent to mention that the portfolio of Islamic banks is still lesser than conventional banks so the largely expanded business of conventional banks has more chances of faulting and getting hit by liquidity shock, Whereas Islamic banks have less expanded portfolio which gives better opportunity for efficient management. The overall scenario exhibits that Islamic banks within their sphere of existence have performed well and are better and efficient as compared to conventional banks.

The Liquidity risk management in case of conventional banks is significantly impacted by loan quality and funding management whereas it shows an inverse relation to asset quality. This shows that conventional banks in Pakistan have a strong funding base that consists of deposit and inter bank borrowing liabilities. Further, the loan quality has been efficiently contributing to the LRM. The credit portfolio and its development has been sound in this case. While the asset quality shows an inverse and insignificant relation with LRM which means the conventional banks have to improve high quality liquid assets and other investments. They should invest more in the assets that can easily be liquidated at fair market value with a little or no loss so the liquidity crunch can be handled efficiently.

The Islamic bank LRM is significantly impacted by all the three independent variables but it has an inverse significant relation with the asset quality. It depicts that funding base and credit portfolio of Islamic banks is strong and it supports LRM well. The asset quality seems to be the problem here for which it is recommended for both types of banks, Islamic and conventional, to invest in high quality liquid assets (HQLA) of different categories of level 1 and level 2-A and 2-B. These securities are highly liquid and most sovereign (government) backed, also includes T-bills, debentures, certificates, Sukuk, and other money market

products offered directly by the regulators on government behalf to stabilize the economic indicator. The model indicates that “LQ” and “FM” have a significant positive impact on LRM in case of IBs so the policy makers of IBs should carefully analyze and maintain LQ and FM whereas the AQ should also be given due preference.

This piece of research will contribute towards developing a better understanding of LRM related issues in Pakistan banking industry and it will not only help the investors, stake holders, and business partners to have an in-depth insight of the banking sector LRM performance but also help top management to develop policies for better management of LRM. More such researches can be conducted in this regard keeping in view the investments and equity portfolio of banks and its impact on LRM in future.

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