Impact of Liquidity Risk on Islamic Banks Performance in Pakistan: Study of Meezan Bank Limited (Ltd) and BankIslami Limited (Ltd) Pakistan (2014-2018)

Waseem Ahmed Jatoi
Ph.D. Candidate, Institute of Commerce, Faculty of Management Sciences, Shah Abdul Latif University Khairpur, Sindh, Lecturer at Govt. Islamia Arts & Commerce College and Postgraduate Studies Centre, Sukkur, Sindh, Email: jatoiwaseem@gmail.com,
Siraj Ahmed Soomro
Assistant Professor, Department of Pakistan Studies, Shah Abdul Latif University Khairpur
Mujeeb-ur-rehman Abro
Associate Professor, Department of Media Studies, Shah Abdul Latif University Khairpur
Muhammad Muqeem Shah
Assistant Professor, Institute of Commerce, Shah Abdul Latif University Khairpur

Abstract:
Many researchers have proved with their studies that one of the factors affecting economic growth of every country is banking performance, so by improving performance of banks the economy of any country can be improved. Major purpose behind this research study is to figure out the influence of liquidity on performance of Islamic banks in Pakistan. Liquidity Risk increases when bank's funds decreases to pay their dues on time. Liquidity (independent variable) of banks has been studied by Loan to Deposit Ratio (L-DR), Liquid Risky Assets to Total Assets (LRA-TA) and Capital to Total Asset Ratio (C-TA). The Bank Performance (dependent variable) has been measured by Return on Assets (ROA) and Return on Equity (ROE). Secondary panel data starting from year (2014-2018) has been derived from financial statements of Meezan Bank Ltd and BankIslami Ltd Pakistan. Regression Model (Multiple Linear) has been used to find out the influence on dependent variable by independent variable. This study results that, keeping other factors constant, Liquidity is positively affecting financial performance (ROA & ROE) of Islamic banks in Pakistan but their impact is insignificant. Based on results we can recommend to Islamic Banks for improving performance they should increase their Net Current Assets.

Key Words: Islamic Banks, Banks' performance, profitability, liquidity.

Introduction

Safe and sound banking system is very important against micro and macro threats and for stability of any country's financial system. Depositors and investors always attract towards stable financial system due to ease of analyzing risks and rewards attached with any bank. Sound financial system also encourages an investment which leads towards economic growth of country. The banking sector is prime source of development and growth and main lenders of private and public sectors in Pakistan (Arif and Nauman

Anees, 2012). So it is very important for banks to identify and mitigate expected potential shocks and risks attached with it. It will be beneficial for banks and also for economy as a whole.

Islamic banking system is increasing at a very rapid pace. Islamic banking established to help small business people to start their businesses by paying them loans without interest, the banks earn by charging expenses on their services. The Islamic Banking structure is based on pillars of Shari'ah (Islamic Laws), prohibiting Riba (Usury), Gharar (Risk Sharing and Deception) etc. In 2000, State Bank of Pakistan decided to introduce Banking System based on Shari'ah principles in Pakistan and firstly Meezan Bank Limited (Ltd) got the license to work as per Islamic laws as a full Islamic bank in 2002. Later on BankIslami and many other Islamic banks got the license of Islamic Banks. Multiple commercial banks were also permitted to establish Islamic subsidiaries subsequently. The market share in Pakistan of Islamic Banking industry on Dec, 2018 was Rs. 2,658 billion making 13.5% share from overall banking industry (SBP, 2018). Islamic banks are ensuring more sound and stable financial system which making it superior over conventional banking system (Khan, 1986).

Banks provide the platform for making payments against the buying and selling of goods and services. Banks also facilitate the savors of money, which lack the knowledge about borrowers, but wanted to invest that refundable on short notice. Banks also try to match the borrowers of long term financing with long term lenders. These activities related to matching the maturities of investments produce the capital for investment, which leads towards economic growth of country. While stabilizing the financial system of economy, the banks face many systematic and non-systematic risks, such as market risk, liquidity risk, operational risk, credit risk etc. Therefore, this research study examines the factors of liquidity risk and evaluates their influence on the performance of Islamic banks in Pakistan from period 2014 to 2018.

Liquidity risk occurs due to mismatches of maturity between liabilities and assets, where assets have a longer tenor to convert into cash than liabilities. Unexpected rise in the demand by borrowers above the predicted level can lead to shortage of cash and cash equivalents (Old Field and Santo Mero, 1997). Banks could face the issue of insolvency and finally bankruptcy due to liquidity crisis. (Arif, Nauman and Anees, 2012) conclude that liquidity risk, as measured by liquidity gap and non-performing loans, negatively affects profitability significantly. Further evidence from Kenya suggests that net stable funding ratio, as a proxy for liquidity risk, inversely affects the ROE and insignificantly affects the performance of commercial banks (Muriithi and Waweru, 2017).

However, some studies present a positive influence of bank liquidity risk over its performance, which is contradictive to above findings. (Lartey et al. 2013) evidences very little positive influence of liquidity on banks' performance in Ghana. A study related to performance of twelve countries banks' of Australia, Europe and North America by (Bourke, 1989) also finds positive impact of liquid assets over banks' profitability. Therefore it is essential to identify the influence of liquidity risk over Islamic banks' performance in Pakistan, as no such type of study is available in period from 2014 to 2018.

Objectives of study

The major objective of this study is to examine impact of selected liquidity risk factors over Islamic banks' performance in Pakistan. Second major objective of this study is to decide that either impact is significant or insignificant of liquidity risk over Islamic Banks' performance. Finally, this research will answer that which bank is managing their liquidity risk in most efficient way and earning profit with the help of descriptive analysis.

Following two hypotheses will be tested into this study:

Hypothesis 1:

Ho: ROA of Islamic Banks in Pakistan is insignificantly influenced by liquidity risk.

H1: ROA of Islamic Banks in Pakistan is significantly influenced by liquidity risk.

Hypothesis 2:

Ho: ROE of Islamic Banks in Pakistan is insignificantly influenced by liquidity risk.

H1: ROE of Islamic Banks in Pakistan is significantly influenced by liquidity risk.

For testing above hypothesis two major Islamic banks of Pakistan namely Meezan Bank Ltd and BankIslami Ltd are chosen for study period from 2014 to 2018, panel data regression model has been used to achieve study objectives and testing hypothesis to arrive at any conclusion.

Remaining part of study is organized as follows: the next section of this study discusses the related literature on liquidity concept, profitability concept, and various studies conducted on liquidity risk impact on profitability of banks in different contexts. Then following section of this study is of research methodology namely material and methods, focusing on sample selection, study model and methodology adopted to test the model. Then after methodology the subsequent section is of results and discussions, providing descriptive, correlation and regression analysis that presents the results of study. In the end study has been concluded with author recommendation and suggestions.

Related Literature Review

Liquidity concept:

As per dictionary definition, Liquidity is the position related to a company to have enough cash and cash equivalents to oblige its short and long term dues when they came due. Liquidity also means easiness to convert the assets into cash when companies need cash. Liquidity banks measure their liquidity by having enough cash or the assets easily convertible into cash to pay their dues and future payables when they requested. As per experts the ability of paying loans and advances by a bank most rely on how effectively they are managing their deposits. Mismanagement of liquidity by banks creates severe problems which could lead them towards bankruptcy and liquidations of assets. So for maintaining confidence of individual and corporate customers, banks must take efficient measures to maintain liquidity. And finally that customer confidence will leads towards profitability of banks.

Profitability Concept:

Profit is the amount excess of cost received through revenue, based on its investment. Profitability of banks is very important to survive in difficult situations and profitability also leads towards stability of financial system of any country. Efficiency of a business, such as business is generating profits or not could be measured by profitability ratios. Profitability can be measured with two popular approaches. First, ability of assets leading to generate profit known as ROA, and second, earnings based on stockholders equity known as ROE. Decisions of investors, depositors, regulatory agencies, management of company, public all depends on the performance and stability of that company (Lovren, 2014). There are also other techniques for measuring profitability of banks as well, such as management efficiency and quality, asset quality, capital adequacy, goal attainment, earning quality, liquidity position, and extent of banks' services coverage.

Previous studies.

(Madhuwanthi and Morawakage, 2019), conducted research to find out influence of liquidity over the performance of banks in SriLanka, they selected data from2006 to 2016 of 6 commercial banks, they resulted that liquidity is significantly and inversely related with banks' performance.

In (Shafir Zaman and Mohiuddin, 2018) conducted study to see the influence of liquidity over the Islamic banks' performance at Bangladesh, they selected 6 Islamic banks' data from period 2012 to 2016, they selected ROA, ROE as dependent variable, Capital to Total Assets, Liquid Risky Assets to Total Assets and Loan to Deposit ratio as independent variable. They concluded by using regression analysis that liquidity is negatively affecting the performance of banks.

Study by (Zaghdoudi and Hakimi, 2017) measures the performance of Tunisian banks based on change in liquidity variable, in which they select data from 1990 to 2015 of 10 banks. Based on regression analysis they concluded that liquidity is negatively affecting banks' performance.

Another study conducted by (Musiega et. al.2017), 30 commercial banks in Kenya were selected to measure the impact of liquidity over profitability of banks from 2006 to 2016, they resulted positive influence of liquidity over performance based on regression analysis.

In (Okaro and Nwakoby, 2016) researched the liquidity management impact over performance of 2 Nigerian banks for period 2000-2015.Study results showed that banks' performance is inversely affected by liquidity risk.

(Saeed and Rahman, 2015) conducted study in Malaysia, in which they selected 21 commercial banks' data from period 2005 to 2013, they uses Return on Assets (ROA) and Return on Equity (ROE) as dependent variables and capital to asset ratio, liquid risky assets to total assets and loan to deposit ratio as independent variables, study concluded that results are mixed and clear conclusion could not be drawn.

(Cuongly, 2015) studied the relationship of liquidity risk over banks' performance at European banks data derived from year 2001 to 2011, in which he concluded liquidity is inversely related with performance of banks.

(Alzorqan, 2014) conducted study in which he selected 2 Jordan banks' data for the period of 2008 to 2010, he measured bank's performance through ROA and ROE, and liquidity through, loan to deposit ratio and current ratio, he concluded by using regression

model, that current ratio is negatively related with banks' performance and loan to deposit ratio is positively affecting banks' performance.

(Ferrouhi, 2014) studied the influence of liquidity over Moroccan banks' performance of period 2001 to 2012, in which he concluded that liquidity ratios are positively affecting performance of banks.

Material and Methods

In this study quantitative based secondary panel data has been used, analyzed and tested for testing hypothesis. Two leading Islamic Banks, namely Meezan Bank Ltd and BankIslami Ltd were selected out of four full-fledged Islamic Banks in Pakistan. Financial data for the year (2014-2018) has been extracted from Banks' Financial Statements published in Annual Reports issued by respective banks as a reliable source of banks' data.

For computations average (mean values) of all ratios was derived and following two research model has been tested in this study:

Model 1 → "ROA = $a + X_1\beta_1 + X_2\beta_2 + X_3\beta_3 + €$"

Model 2 → "ROE = $a + X_1\beta_1 + X_2\beta_2 + X_3\beta_3 + €$"

For measuring Banks' Financial Performance ROA and ROE were used as dependent variables as previously used by (Madhwanthi & Morawakage, 2019; Farhan et al, 2011; Naceur & Goaied, 2001; Siddiqui, 2008; Berger, 1995). Loan to Deposit Ratio (L-DR), Liquid Risky Assets to Total Assets Ratio (LRD-TA) and Capital to Total Assets Ratio (C-A) were used as Independent Variables as previously used by (Mohiuddin & Farhan, 2018; Saeed & Rahaman, 2015). The details related to variables are given below in Table 3(a):

Sign	Variable	Proxy
Dependent Variables		
Y_1	ROA (Return on Assets)	Net Income / Total Assets
Y_2	ROE (Return on Equity)	Net Income / Total Equity
Independent Variables		
X_1	L-DR (Loan to Deposit Ratio)	Loan(Advances) / Total Deposits
X_2	LRA-TA (Liquid Risky Assets to Total Assets)	Cash & Cash Equivalents / Total Assets
X_3	C-TA (Capital to Total Assets)	Total Equity / Total Assets
A	Intercept	
B	Coefficients of Independent Variables	
€	Error Term	

Table 3(a): Introduction of Variables and Coefficients of study

For testing above models and deriving coefficients of independent variables multiple regression technique used with the help of Microsoft Excel Data Analysis Tool.

Results and Discussions

The profitability of Islamic Banks depends on liquidity of banks. Liquidity (independent variable) has been measured in this study through Liquidity to Deposit Ratio (L-DR), Liquid Risky Assets to Total Assets (LDR-TA) and Capital to Total Assets (C-TA),

whose impact had to be measured on profitability dimensions, namely, Return on Assets (ROA) and Return on Equity (ROE) (dependent variables). Slight movement in the independent variable can seriously influence the banks' profitability. These variables are in internal control with management of banks, so by efficiently managing, they could improve the profitability.

**Comparative Ratio Analysis**

Return on Assets (ROA). First most widely used measurement for banks' profitability is ROA. ROA computed through dividing Net Income with Total Assets. It indicates that at what extent banks are effectively utilizing there assets (resources) of firm for earning.
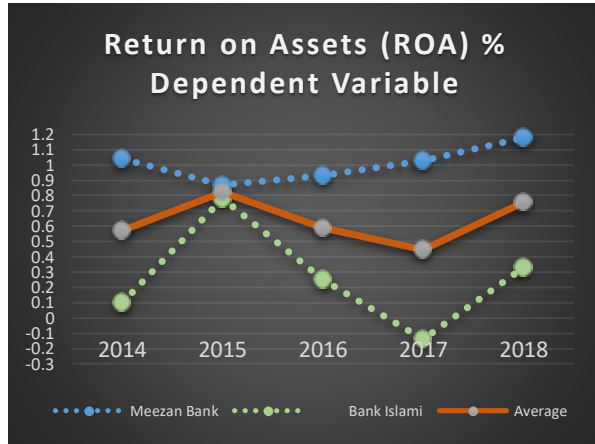
Figure 4(a): ROA of Meezan Bank, BankIslami and Average profit.

In Figure 4(a), Average ROA of Islamic banks are year 2014 was 0.57% which increases in the year 2015 up to 0.83%. After that ROA is in decreasing trend up to 2018 stopping at 0.76%. Fall in the return on assets may decrease the position to settle the short term dues of stakeholders. Although comparing both banks, ROA of Meezan Bank is better than BankIslami throughout five years.

Return on Equity (ROE).
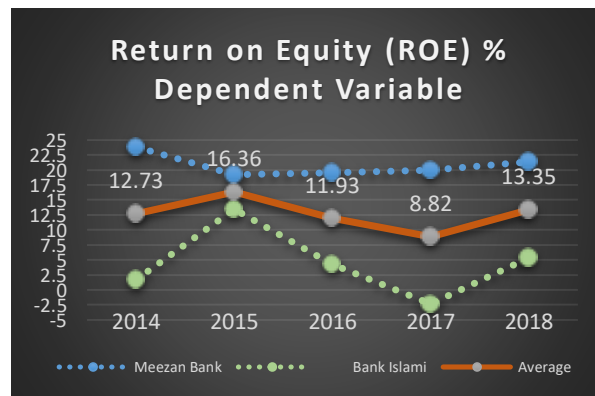
Figure 4(b): ROE of Meezan Bank, BankIslami and Average

Next most widely used measurement for profitability of Banks is ROE. ROE is computed by dividing Net Income with Total Equity. It indicates that at what extent banks are effectively utilizing the investments of shareholders for earning profit. In Figure 4(b), Average ROE of Islamic banks in year 2014 was 12.73% which increases in the year 2015 up to 16.36%. After that, ROE is in decreasing trend up to 2018 stopping at 13.35%. We can see that ROA and ROE both are depicting same behavior throughout study period 2014-2018. Although comparing both banks, ROE of Meezan Bank is better than BankIslami throughout five years.

Loan (Advances) – Deposit Ratio (LDR): Loan to deposit ratio (LDR) is most widely used measure of liquidity. LDR can be computed by dividing total advances with total deposits. Higher the LDR ratio reflects lower the liquidity of banks, because due to more advances banks have fewer funds available for payment to depositors. In figure 4(c), Average LDR in year 2014 was 64.75% which increases in the year 2015 up to 64.92% results decrease in liquidity. After that LDR is in decreasing trend up to 2018 stopping at 45.95%.
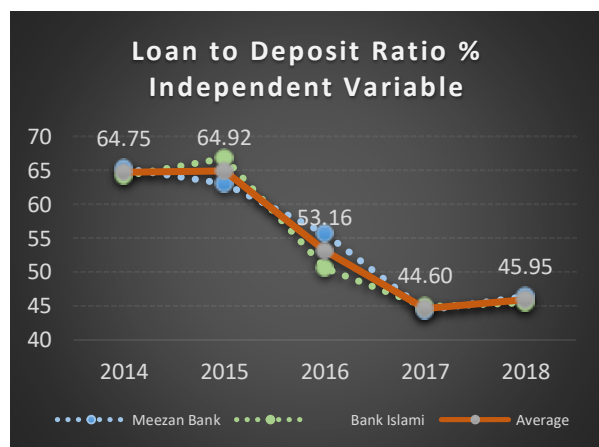
Figure 4(c): LDR of Meezan Bank, BankIslami and Average
It indicates that banks' have improved their liquidity position in later years. By comparing Meezan Bank with BankIslami more or less both are showing same pattern of LDR throughout study period (2014-2018).

Capital to Total Assets (CTA):
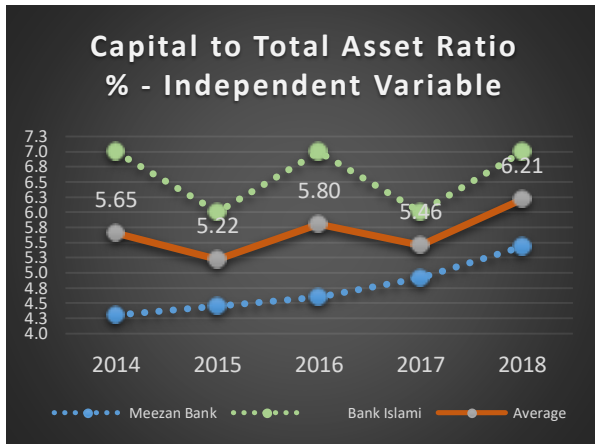
Figure 4(d): CTA of Meezan Bank, BankIslami and Average

Another most widely liquidity measuring ratio is Capital Adequacy Ratio (CTA). It is calculated by dividing Total Equity (Total Assets – Total Liabilities) with Total Assets. Higher the CTA ratio reflects higher the liquidity of banks and lesser the dependence of debt financing, because due to more money available with banks in equity funds leads to lesser dependence on debt financing. In figure 4(d), Average CTA in year 2014 was 5.65% which decreases in the year 2015 up to 5.22% results decrease in liquidity. In the year 2016, CTA in increasing up to 5.80% means company liquidity position is improving then before. But again in year 2017, CTA is falling up to 5.46% results decrease in liquidity of banks, and at year 2018 it is again showing increasing trend up to 6.21% higher in overall periods improving the liquidity of banks higher than ever before. It indicates that CTA have shown mix trend in selected period of 2014-2018. If we will compare both banks, then Meezan Bank CTA ratio is better than BankIslami, which means Meezan Bank is holding more equity financing than debt financing which improves their liquidity position as compared to BankIslami.

Liquid Risky Assets to Total Assets (LRA-TA):
Another most widely liquidity measuring ratio is LRA-TA. It is computed by dividing Cash and Cash Equivalents (most liquid funds available for payments) with Total Assets. Higher the LRA-TA ratio reflects higher the liquidity of banks, because due to more money available to banks have more funds available for payment to depositors.
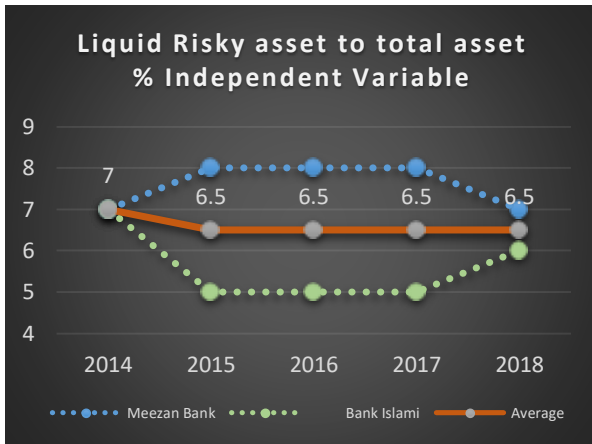
4(e), Average Figure 4(e): LRA-TA of Meezan Bank, BankIslami and Average

LRA-TA in year 2014 was 7% which decreases in the year 2015 up to 6.5% results decrease in liquidity and remained constant up to year 2018. It indicates that LRA-TA have shown constant trend in selected period of 2015-2018. After comparing, we can see that Meezan Bank's Liquidity is better than BankIslami, by holding more Cash & Cash Equivalents assets.

Looking at the ratios of liquidity and its impact on profitability, it seems difficult to predict their variations, because due to fall in liquidity ratios in 2015, the banks' profitability has increased, on the other side in remaining periods from 2016-2018, banks at some extent have improved their liquidity, although in same period profitability is decreasing. It indicates the negative relationship of liquidity with profitability. So for understanding clear relationship further descriptive, correlation and regressions tests have been conducted.

Descriptive Analysis

Ratios	Mean	S.D	CV	Range	Count
L - DR	54.67	9.83	0.18	20.32	5.00
LRA - TA	6.60	0.22	0.03	0.50	5.00
C - TA	5.67	0.37	0.07	0.99	5.00
ROA	0.64	**0.15**	0.24	0.38	5.00
ROE	12.64	2.72	0.21	7.55	5.00

Table 4(a): Descriptive statistics of study

In this descriptive analysis, mean values have been computed by totaling individual ratios and diving total with number of observations. Standard deviation has been calculated, which shows the amount of risk involved with each ratio. It also indicates the degree of variation in mean value. So we can see in Table 4(a) that L-DR and ROE are slightly riskier than other ratios. Coefficient of variation has been computed dividing standard deviation with mean, it indicates the variation in data sample as compared to mean of entire population. Lower value in CV indicate lower risk, so looking at table LRA-TA and C-TA are less risky as compared to other ratios. Range has been calculated to find

out the difference between highest and lowest value which also indicates spread of values. And count here shows the number of years which have been chosen for study.

Correlation Analysis

Correlation analysis shows the relationship among variables and degree of variations dependent into one variable by another

Table 4(b): Correlation Analysis

Correlation Statistics					
	L – DR	*LRA - TA*	*C - TA*	*ROA*	*ROE*
L - DR	1.00				
LRA - TA	0.57	1.00			
C - TA	-0.52	-0.03	1.00		
ROA	0.37	-0.25	0.07	1.00	
ROE	0.68	0.02	-0.14	0.93	1.00

variable. Table 4(b) shows that LDR is positively correlated with ROA and ROE, means 1% increase in L-DR will increase the .37% ROA and .68% ROE and vice versa. LRA-TA is negatively correlated with ROA and positively correlated with ROE, means 1% increase in LRA-TA will decrease .25% ROA and will increase .02% ROE. Last independent variable C-TA is directly correlated with ROA and inversely correlated with ROE, means 1% increase in C-TA will increase .07% ROA and will decrease .14% ROE. In the same way independent and dependent variables are also correlated with each other, such as, 1% increase in ROA will bring .93 increase in ROE and vice versa.

Regression Analysis Based on ROA

SUMMARY	**ROA**					
Regression Statistics						
Multiple R	0.88					
R Square	0.77					
Adjusted R Square	0.07					
Standard Error	0.15					
Observations	5					
ANOVA						
	Df	*Sum of Square*	*Mean Square*	*F*	*Significance F*	
Regression	3	0.071	0.024	1.103	0.589	
Residual	1	0.022	0.022			
Total	4	0.093				
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*

Intercept	2.243	2.494	0.899	0.534	-29.452	33.937
LDR	0.020	0.012	1.741	0.332	-0.126	0.166
LRATA	-0.658	0.433	-1.520	0.371	-6.161	4.844
CTA	0.290	0.248	1.167	0.451	-2.864	3.444

Table 4(c): Regression Analysis Based on ROA

Hypothesis 1:
Ho: ROA of Islamic Banks in Pakistan is insignificantly influenced by liquidity risk.
H1: ROA of Islamic Banks in Pakistan is significantly influenced by liquidity risk.

Regression analysis, Multiple R depicts relationship among variables. Here Multiple R figure is .88 with ROA that means value is close to 1, so it is perfectly positively related with ROA. Adjusted R Square shows that 7% positive change in dependent variable (ROA) is caused by independent variable (LDR, LRATA, and CTA). ANOVA Table Significance F shows the goodness of Model so value less than .05 shows the model is good fit. So here value is .589 above .05, so model is not good

fit in this study. P values in the last section of Table 4(c) shows the level of significance and helps us to decide significant or insignificant impact of coefficients. Values less than .05 shows significant impact on ROA, but here all the coefficients values are above .05, so all coefficients are insignificantly affecting ROA including intercept. So null hypothesis is proved in this study, means ROA is insignificantly influenced by liquidity risk. Following equation could be formed based on individual variations by independent liquidity variables on ROA:

$ROA = a + \beta_1(L\text{-}DR) + \beta_2(LRA\text{-}TA) + \beta_3(C\text{-}TA) + €$
$2.243 + .20(L\text{-}DR) - .658(LRA\text{-}TA) + .290(C\text{-}TA) + €$

It can be seen that banking sector liquidity measured by Capital to Total Assets Ratio, Loan to Deposit Ratio, and intercept has a positive effect on ROA, while any increase in Liquid Risky Assets to Total Assets negatively affect ROA.

Regression Analysis Based on ROE

SUMMARY	ROE					
Regression Statistics						
Multiple R	0.933					
R Square	0.870					
Adjusted R Square	0.479					
Standard Error	1.960					
Observations	5					
ANOVA						
	Df	*Sum of Square*	*Mean Square*	*F*	*Significance F*	
Regression	3	25.652	8.551	2.227	0.449	
Residual	1	3.840	3.840			
Total	4	29.492				
	Coefficie	*Standard*	*t Stat*	*P-*	*Lower 95%*	*Upper*

	nts	*Error*		*value*		*95%*
Intercept	29.927	33.308	0.898	0.534	-393.290	453.143
LDR	0.393	0.154	2.556	0.237	-1.559	2.344
LRATA	-9.452	5.783	-1.635	0.350	-82.927	64.023
CTA	4.168	3.314	1.257	0.428	-37.947	46.282

Table 4(d): Regression Analysis Based on ROE

Hypothesis 2:
Ho:ROE of Islamic Banks in Pakistan is insignificantly influenced by liquidity risk.
H1: ROE of Islamic Banks in Pakistan is significantly influenced by liquidity risk.

Regression analysis, Multiple R depicts relationship among variables. Here Multiple R figure is .933 with ROE that means value is close to 1, so it is perfectly positively related with ROE. Adjusted R Square shows that 47% positive change in dependent variable (ROE) is caused by independent variable (LDR, LRATA, and CTA). ANOVA Table Significance F shows the goodness of Model so value less than .05 shows the model is good fit. So here value is .449 above .05, so model is not good fit in this study. P values in the last section of Table 4(d) shows the level of significance and helps us to decide significant or insignificant impact of coefficients. Values less than .05 shows significant impact on ROE, but here all the coefficients values are above .05, so all coefficients are insignificantly affecting ROE including intercept. So null hypothesis is proved in this study, means ROE is insignificantly influenced by liquidity risk. Following equation could be formed based on individual variation by independent liquidity variables on ROE:

$$ROE = a + \beta_1(L\text{-}DR) + \beta_2(LRA\text{-}TA) + \beta_3(C\text{-}TA) + €$$
$$29.92 + .393(L\text{-}DR) - 9.45(LRA - TA) + 4.16(C\text{-}TA) + €$$

It can be seen that banking sector liquidity measured by Capital to Total Assets Ratio, Loan to Deposit Ratio and intercept has a positive effect on ROE, while any increase in Liquid Risky Assets to Total Assets negatively affect ROA.

Conclusion
Addressing the issue of liquidity is very important for banks to efficiently operate into this competitive world. This research studied the bank's related profitability determinants (ROA and ROA) of Islamic Banks in Pakistan. This study analyzed panel data of two systematically important Islamic Banks namely, Meezan Bank Limited (Ltd) and BankIslami Limited (Ltd) figures, for the period of 2014 to 2018 that shows the long run relationship of profitability (dependent) with liquidity (independent)variables. BankIslami is facing more liquidity crisis than Meezan Bank that leads towards decrease in profitability.
In this study the aggregate results indicate that Islamic banks' profitability is positively affected by liquidity variables. The results are consistent with (O.J. Paul, et al. 2016), in which it was concluded that liquidity has significant positive effect on banks' profitability in Rwanda. Although the results are opposed with (R.M.R. Madhuwanthi, 2019), (M. Mohiuddin, 2018), (Kalecki, 1937), in which liquidity indicators had negative impact over performance of Banks. Looking at study hypothesis, the null hypothesis has been

accepted means ROA and ROE of Islamic Banks in Pakistan are insignificantly affected by Liquidity determinants. Based on results it is recommended to Islamic banks, to manage their liquidity risk efficiently because it is positively affecting banks' performance. However, the impact is insignificant so other areas of banks also needed to be monitored properly. In future further research should be made in areas that might have significant impact, such as banks' leverage, asset management etc. Although the results of this study are time being means in future the results may vary based on changes in liquidity and other factors.

References.

Alzorqan, S. T. (2014). Bank liquidity risk and performance: An empirical study of banking system in Jordan. Research Journal of Finance and Accounting, 5(12), 155 – 164.

Arif, A. & Anees, A. (2012). Liquidity risk and performance of banking system. Journal of financial regulation and compliance, 20(2), 182 – 195.

Berger, A. (1995). The relationship between capital and earnings in Banking. Journal of Money, Credit and Banking Vol.27, 432 – 456.

Bourke, P. (1989). Concentration and other determinants of banking profitability in Europe, North America and Australia. Journal of Banking and Finance 13, 65 – 79.

Farhan, A. et. al. (2011). Factors influencing the profitability of Islamic banks of Pakistan. International research journal of finance and economics, 66(2011)

Ferrouhi, M.E. (2014). Bank liquidity performance: Evidence from Moroccan banking industry. Teorijaipraktika/Business: Theory and practice, 15(4), 351 – 361.

Kalecki, M. (1937). The principle of increasing risk. Economica, New series, 4(16), 440 – 447.

Khan, M. (1986). Islamic interest free banking: A theoretical analysis. IMF staff papers.

Lartey, V. (2013). The relationship between liquidity and profitability of listed banks in Ghana. International journal of business and social sciences 3(4), 20 – 25.

Lovren, M. (2014). Another look at the instrumental variable estimation of error-components model. Journal of Econometrics, 68(1), 29 – 51.

Madhuwanhi, R.M.R. & P.S. Morawakage. (2019). Impact of liquidity risk on performance of Sri Lankan commercial banks. Sri Lanka Journal of Social Sciences 42(1), 53 – 64.

Mohiuddin, C. & Shafir, Z. (2018). Effect of liquidity risk on performance of Islamic banks in Bangladesh. IOSR Journal of Economics and Finance, 9(4), 01 – 09.

Muriithi, J. & Waweru, K. (2017). Liquidity risk and financial performance of commercial banks in Kenya. International journal of economics and finance, 9(3), P. 256.

Musiega, et. al. (2017). Influence of liquidity risk on performance of commercial banks in Kenya. IOSR Journal of economics and finance, Volume 8, Issue 3, 67 – 75.

Naceur, S. B & Goaied, M. (2001). The determinants of Tunisian deposit. Applied financial economics, 11(3), 317 – 319.

Okaro, C.S. & Nwakoby, C.N. (2016). Effect of liquidity management on performance of deposit money banks in Nigeria. Journal of policy and development studies 10(3)

Okello, J.P. et. al. (2016). Influence of Banking Sector liquidity on financial performance of commercial banks in Rwanda. International journal of advance research, 4(9), 584 – 600.

Oldfield, G. & Santomero, A. (1997). Risk Management in Financial institution. Loan management review, 39(1), 33 – 46.

Saeed, M. H & Rahaman, N.A.A. (2015). Liquidity Risk and Performance: Malaysia Banks empirical analysis. Australian Journal of Basic & Applied Sciences, 9(28), 80 – 84.

Siddiqui, A. (2008). Financial contracts, risk and performance of Islamic banking. Managerial Finance, 34(10), 680 – 694.

State Bank of Pakistan, (2018). Islamic banking department, Islamic banking bulletin 2018

Appendix

Liquidity Ratios (Independent Variables)							
		2014	**2015**	**2016**	**2017**	**2018**
L – DR %	Meezan	65.3	63	55.7	44.3	46.4
	BankIslami	64.2	66.83	50.62	44.89	45.5
LRA – TA %	Meezan	7	8	8	8	7
	BankIslami	7	5	5	5	6
C – TA %	Meezan	4.3	4.4	4.6	4.9	5.4
	BankIslami	7	6	7	6	7
Profitability Ratios (Dependent Variables)						
ROA%	Meezan	1.04	0.87	0.93	1.03	1.18
	BankIslami	0.1	0.78	0.25	-0.14	0.33
ROE %	Meezan	23.77	19.26	19.58	20	21.35
	BankIslami	1.69	13.46	4.27	-2.37	5.35

Table: Independent and Dependent Ratios of Meezan Bank & BankIslami (2014-2018)

List of Full Fledged Islamic Banks in Pakistan		
S. No	**Name**	**Branches**
1	Meezan Bank Ltd	660
2	Bank Islami Pakistan Ltd	218
3	Dubai Islamic Bank Pakistan Ltd	200
4	AlBaraka Bank (Pakistan) Ltd	183

Table: List of Full-fledged Islamic banks in Pakistan