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AN ANALYTICAL EXPLORATION OF LIQUIDITY RISK MANAGEMENT: A COMPARATIVE ANALYSIS BETWEEN ISLAMIC AND CONVENTIONAL BANKING INSTITUTIONS

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Abstract

This research aims to examine & differentiate the efficiency of Islamic and Conventional/ traditional Banking's liquidity risk management in Pakistan in order to look out which of both the traditional and Islamic system of banking is performing better. So that this research explains that in Pakistan there many issues so the research focuses on conventional and Islamic banks in Pakistan. The sample is taken from banking sector in Pakistan 5 banks are conventional and 5 banks are Islamic. There are three variables under study. Previous studies show a positive significant relationship with liquidity. But in Islamic banks the relationship is opposite. Therefore, by testing the data gathered it showed a positive relationship as shown in literature. This study gives and giving future direction to the managers that that loan quality is significant so that the manager benefits that he cannot lose losses so that manager requires to solve asset quality in future. In Islamic banks indicates that Asset quality and funding is no impact on liquidity risk management. But loan quality has a significant impact on liquidity risk management.

1.Introduction

Financial sector play major role of contribution in growth. The financial system is a part of a country's economy that is built up of institutions and firms that make available financial support and services to the retail customers & commercial institutes. The industries which comes under the umbrella of this sector are public and private banks, investment and insurance companies and the firms which are engaged in real estate business. The other definition, scientist can reason that bank is an organization, which is joined for the saving, pulling out and getting cash. Islamic bank likewise assume a basic function in a nation's financial improvement through capital amassing, preparation of investment funds, achieving independence. As indicated by the Islamic Financial Services Board (2012), not According to Vento (Akhtar, 2011) (Moin, 2008) (Sukmana, 2015) (Sukmana, 2015) (Sukmana, 2015)Ganga (2009), liquidity represented the capacity of banks to look at during the equilibrium of inflow and surges over the long haul. With the presence of liquidity hazard, banks should be wary of the income that end up financial benefits can be kept up without being influenced by liquidity risk (Vento, 2009). Along these lines, the target of this examination is to recognize factors that impact liquidity danger and execution since when worldwide monetary emergency happens, disappointment of danger the executives will influence the exhibition of the financial framework. Liquidity hazard is expected misfortune to emerging from powerlessness either to meet the bank commitments or asset increments in resources as they came due without causing unsatisfactory expenses or misfortunes (Febianto, 2012). Egypt is among nations that set up and upheld Islamic record near to standard premium based money related structures (Galal, 2009) Banks take stores that are callable on premium or that on ordinary has less advancement than that of the financing contracts they sell. While, moving improvement gives patrons critical liquidity assurance, it simultaneously grows the banks' introduction to liquidity peril (Syed, 2004). Banks should keep up good proportions of capital and liquidity resources for guarantee they can meet their liabilities when they came due (Tiwari, 2009).

1.1 Linkage between Asset Quality and liquidity risk management

Total loan of all out resources (LOA) proportion calculates the Asset Quality. There is a critical contrast between Islamic banks and conventional banks as the determined t-esteem is

higher and the t test result shows that the complete advances of Islamic banks is bigger, which is at 10% when contrasted with conventional banks which is just 4 percent. Liquidity risk emerges because of deficient liquidity that lessens bank's capacity to meet its liabilities when it falls due. Liquidity risk shows up in both Mudharabah and Mu-sharakah monetary items. In limited Mudharabah speculation represents model, a sound reimbursement limit is required on the grounds that reserve suppliers reserve the privilege to pull out their assets whenever. Another model can be seen from Musharakah financing where bank should have the option to give the submitted assets just as paying the costs of the organization or benefit to the counterparty.

1.2 Linkage between loan quality and liquidity risk management

A connected issue and one of conceivably more prominent approach interest is whether made sure about credits (instead of made sure about borrowers) are less secure than unstable loans. Ceteris paribus, security diminishes the peril of a given credit, since it gives the moneylender a particular case on a resource without reducing its overall case against the borrower [e.g., Barro (1976); Stiglitz and Weiss (1981)]. Strategy producers contend the caused misfortune model hidden current advance misfortune bookkeeping fortifies supportive of recurrent impacts of bank capital guideline, and ought to in this manner be changed to permit bank supervisors more caution to join forward-looking decisions into credit misfortune provisions. However, while alleviating favorable to cyclicality is a significant goal, it is likewise imperative to comprehend other potential outcomes of changing advance loss accounting.

1.3 Linkages between funding and liquidity risk management

The lowers market liquidity, leading to higher volatility. Dark and Gilson's experimental work tests just the centrality of IPOs over the long haul in the US. We test various different elements notwithstanding IPOs, and use board information for a very long time and 15 nations. The components we test are the ones identified in the writing on investment. Our outcomes demonstrate that IPOs are the main determinant of funding contributing. Private benefits reserve levels sway investment after some time, yet not across countries. Our examination shows the need of isolating funding into early seed and startup and later development stage contributing, both for Ž. Ž. In this way, work market rigidities adversely influence beginning phase funding speculations, however have no effect on later stage investment ventures. Initial public offerings

have no effect on beginning phase speculations across nations, yet are a huge determinant for later stage funding ventures. Government supported investment isn't as emphatically controlled by IPOs as non-government financed funding.

2. Literature Review

Numerous investigations have been led to think about Islamic and traditional financial framework everywhere on the world. (Usman khan ,2012) pondered the efficiency and liquidity of conventional and Islamic banks of the Republic of Pakistan by using money related extents from 2007 through 2009.The assessment exhibits that as Islamic banking is more dependent on esteem, as they need to be, Their performance in terms of liquidity is far better than the conventional system of banking , beside this conventional banking system has got better customer base advantage in year 2007. Regardless, in 2008 & 2009, The Islamic banking system acted in a way that is superior to standard banks due to plunge and money related crisis on the planet). Made a relationship among the Islamic & the ordinary banks of the Bahrain through help of advantage, liquidity ratio and credit peril through usage of financial extents. Data taken from six Islamic and fifteen standard banks have been used from 1991 to 2001. The results show that both monetary streams are comparable dependent on advantage and liquidity regardless, in light of colossal worth per capita Islamic banks are better than standard banks.; Another huge examination by (Moin, S 2008) find that efficiency and liquidity have no basic differences while risk and dissolvability extent show that the peril of ordinary banks is more and dissolvability isn't actually Islamic banks in Pakistan during 2003-07 anticipating that Islamic banking systems are less successful than the conventional banking systems; Likewise, (Akhtar et al 2011) moreover guided an assessment to take a gander at the introduction and adequacy of the Islamic banking system of Pakistan with public and the private standard banks by picking one bank from each characterization for the period 2006 to 2010. (Mahmood, 2005)

Investigation found that advantage execution subject to benefit for assets and pay made per dollar of Islamic bank is openly and private customary banks yet returns of conventional bank exceeds Islamic bank returns, while the cost to pay extent of the banks favors the private bank. The credit hazard execution of the Islamic bank is better than customary bank with respect to fundamental incentive to amount to asset extent and hard and fast an incentive to net

development, while normal bank performed better for impeded development to net development than Islamic bank; Arthur et al., (2010) foreseen future getting with the help of cash stream from assignments (Sukmana, 2015)Yearly data from 1992 to 2005 from Australian firm were used. Relapse model shows that disaggregated pay action (CFO) has more information to foresee future benefit and have less slip-up. Chia and Loftus (1997) moreover found that disaggregated pay give more information than added up to benefit about stock return in Australian stock trade. This examination maintained and found that liquidity risk the board unmistakable among Islamic and customary banks (Akhtar, 2011) in Pakistan. They came to know that size of the bank and liquidity are positively related. To evaluate the banks, the paper uses net development to amount to assets. The liquidity perils looked by Islamic banking are more critical for the bank viability (Khan and Ahmad, 2001). Henceforth, there is a prerequisite for establishments and experts to make asset based insurances to be traded.

Loan quality has significant relationship with liquidity risk management. Financing has additionally huge relationship with liquidity hazard the executives and resource quality has critical relationship with liquidity hazard the board. Concentrates on three kinds of bank hazards that influence the Islamic money uncovered that high store instability (DEPVOL) will open to liquidity hazard. In this way, high vulnerability store will diminish the capacity of the bank to make a withdrawal and furthermore have a normal distinguished where the higher credit is recognized the higher liquidity danger will showed up so that shows the LVOL should have an immediate relationship with liquidity to ensure the danger will diminish.

Different investigations on execution examination of Islamic and regular banks in the GCC included: (Olsun, 2008) they have a great deal of studding acted and furthermore to think about Islamic and regular banks everywhere on the world. Here (Indriani, 2008) the benefit and liquidness of Islamic and ordinary banks of Pakistan utilizing its monetary proportions. Here the investigation shows that the Islamic banks more depend on value So that they are better on liquidity. Yet, customary bank much better then Islamic bank 2007. Yet, in 2008 and 2009 because of monetary downturn and emergencies Islamic bank execution better Comparison among Islamic and regular keep money with the assistance of benefit, liquidity, and credit risk the executives. By utilizing monetary proportions and furthermore information gather of 6 (Olson, 2008)Islamic banks and 15 ordinary banks have been utilized from 1991-2001.

(Mahmood, 2005) That benefit and liquidity have no huge contrast. However, show the dissolvability a greater amount of ordinary banks and less danger dissolvability on Islamic financial show the positive critical impact between them. Here the examination shows that the benefit execution base on profit for resources and furthermore per dollar of Islamic bank and contrast regular bank. Yet, return on value is superior to regular banks. Here Islamic bank is superior to traditional banks as far as value and to add up to resource proportion and complete value to net credit. Here relapse model shows that the data shows future profit and less mistake. In any case, Australian stock trade that disaggregated gives more data the collected income about stock. Here examination bank hazard that Islamic money chided high store proportion instability will uncover liquidity hazard here (Indriani, 2008), bigger with draw contributor was a normal credits. Have a positive relationship the executives and this hypothecs keep up the elevated level of development.

This extent shows the efficiency of asset the board coordinated by the bank. Adequacy Ratio of capital is the base capital adequacy extent, which ought to be guaranteed by the bank. Vehicle is driven to make sure about patrons and show the reliability and profitability of the bank. Coming up next are a segment of the past assessments related to banking associations' liquidity the heads? It suggests that the benefit for assets of profitability extent before two things which is cost and zakat of the full scale assets. This extent sees the capability of assets the chiefs drove by the bank. Also, moreover the bank use capital for regulating peril to (Indriani, 2008) experience supported by the bank as an instrument to finish operational activities to the sensibility of bank. This should be claimed by the bank that danger might be emerging.

Mahmood (2005) analyzed the monetary execution of Islamic banking against ordinary banking in Pakistan. His examination covered the year 2000 to 2004 and uncovered that practically in all proportions; Islamic banks were higher than traditional banks. To additionally affirm the elevated level of debauchery in the financial business, the peak bank, among August and September 2009, reported the terminating of eight bank CEOs and chiefs, designated new (CEOs) and chiefs to man the banks, and infused US $4 billion into the influenced banks as a bailout measure. This most recent activity of the zenith bank flags that, maybe, almost no accomplishments have been made inside the four-year post-combination time in the Nigerian financial industry. While banking solidification may have assisted with accomplishing security in

some creating economies, the isolator approach received on account of Nigeria has end up being incapable.

2.1 Research gap

This research will study a lot of article the author review that on liquidity risk management worked on 2017. So that the gap of the study and near future operation side work In addition, Islamic and conventional banks ought to have occasional income projections can foresee whether over-abundance or inadequate liquidity levels will be the bank presented in future. In the event that insufficiencies are underneath required operational levels, the board should make a move to address these levels. Generally, banks ought to build up least working liquidity level to keep up an agreeable pad past the base hold necessity, to address money issues. Moreover, a necessary objective for working liquidity should be kept up as an excessive amount of liquidity negatively affects profit. Subsequently, an objective reach for liquidity, communicated as an extent of resources, needed to be set up.

2.2 Research questions

Following research questions will be justified in this study:

RQ1: What is the outcome of loan quality on liquidity risk management?
RQ2: What is the outcome of funding on liquidity risk management?
RQ3: What is the outcome of loan quality on liquidity risk management?

Hypothesis

H1; loan quality is an important relationship with liquidity risk management.

H2; Asset quality is an important relationship with liquidity risk management.

H3; Funding is an important relationship with liquidity risk management.

3. Method

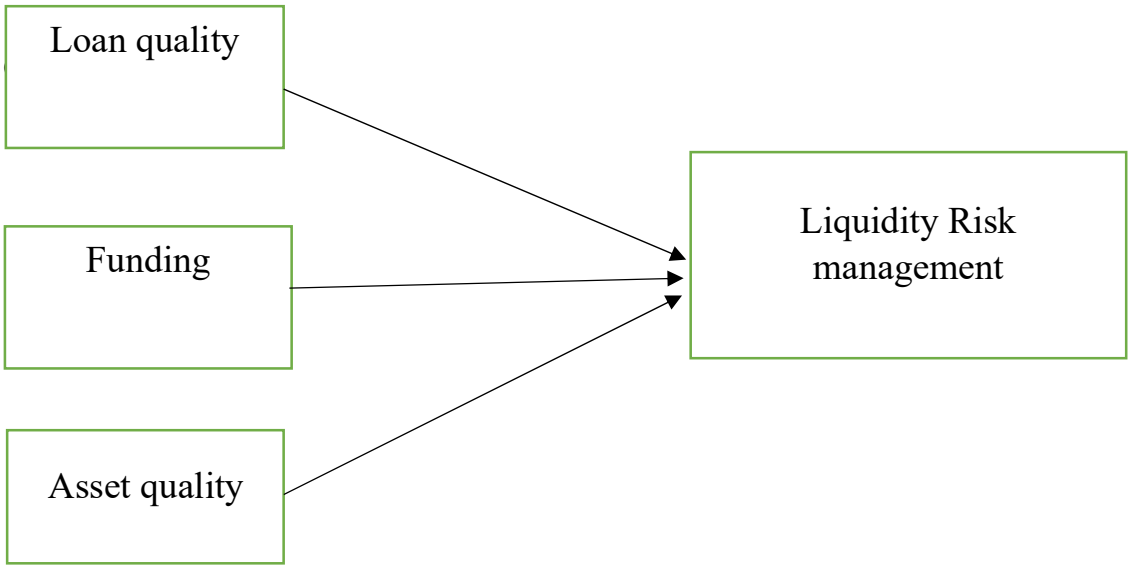
3.1 Data composition

The study is conducted on secondary data which is mainly collected from banks websites and state bank of Pakistan financial statement. Majority of data working capital components is extracted from annual reports of banks.

3.2 Data collection

Data have been collected from banking website such as business Recorder State Bank website and bank annual reports of conventional and Islamic banks.

3.3 Conceptual framework



4. Results and Analysis

Data has been analyzed and results have been found out through E Views software. Initially, results of conventional banks have been discussed and later are for Islamic banks.

4.1 Cross-section-wise

Redundant Fixed Effects Tests			
Pool: POOL			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	9.392035	(4,22)	0.0001
Cross-section Chi-square	29.882352	4	0.0000

4.1.1 Redundant fixed effect test

For the data calculation have taken ten banks five are conventional and five Islamic banks So we go to pool generate variable have total four variable three is independent variable and one is dependent variable. When generate equation then we write one by one variable. Then the next step is poll estimation in this we estimated and comparison between cross-section and pool and fixed and then the compare the fixed and random that the cross-section is significant because value is 0.0000.

4.1.2 Correlated Random Effects - Hausman Test

Pool: POOL

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	13.293239	3	0.0040

So there are the cross-section random effects. It is significant because the fix and the random housemen test.so the result of the hausman test is significant .So run the fix. Hence, for cross section model is cross-section random effects.

4.2 Time Period

4.2.1 Redundant Fixed Effects Tests

Pool: POOL

Test period fixed effects

Effects Test	Statistic	d.f.	Prob.
Period F	1.281712	(5,21)	0.3088
Period Chi-square	7.989990	5	0.1568

So here for the period series run the fix effect .because the value is more than five percent. Once the value comes insignificant then run the random.

4.2.2 Correlated Random Effects – Hausman Test

Pool: POOL

Test period random effects

Test SummaryChi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random6.281752	3	0.0987

So here the result is for correlated random effects for hausman test it is insignificant.so that run the random.

4.3 Final Model: Random Effects across Cross-Section and Time Period

The Final Model for Random Effects across Cross-Section and Time Period is as followed;

Dependent Variable: LRM_?

Method: Pooled EGLS (Two-way random effects)

Date: 01/10/18 Time: 18:59

Sample: 2011 2016

Included observations: 6

Cross-sections included: 5

Total pool (balanced) observations: 30

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-132.4674	42.27086	-3.133776	0.0042
AQ	0.229283	0.154450	1.484510	0.1497
FUN	1.393490	0.444216	3.136965	0.0042
LQ	1.843716	0.373772	4.932724	0.0000
Random Effects (Cross)				
ABL—C	-0.828171			
HBL—C	0.158204			
MCB—C	-3.902449			
NBI—C	3.259124			
UBL—C	1.313292			
Random Effects (Period)				
2011—C	0.000000			
2012—C	0.000000			
2013—C	0.000000			
2014—C	0.000000			
2015—C	0.000000			
2016—C	0.000000			

	Effects Specification		
		S.D.	Rho
Cross-section random		1.462018	0.7634
Period random		0.000000	0.0000
Idiosyncratic random		0.814010	0.2366

	Weighted Statistics

R-squared	0.487591	Mean dependent var	2.078018
Adjusted R-squared	0.428466	S.D. dependent var	1.729226
S.E. of regression	1.307292	Sum squared resid	44.43431
F-statistic	8.246890	Durbin-Watson stat	1.238277
Prob(F-statistic)	0.000508		

Unweight Statistics

R-squared	-0.111820	Mean dependent var	9.375333
Sum squared resid	222.9228	Durbin-Watson stat	0.246821

So this is the final result for overall .Our dependent variable is liquidity risk management. So here the variable of liquidity risks management of Intercept constant of the coefficient so the average of irrespective of the bank and number of years is -132.4674. When we check for the ABL own constant is -0.828 and the random effect periods. Is 0.0000 so the ABL in 2011 effect the liquidity is we will calculate the intercept -132.4674 – 0.828 + 0.0000 = -133.2954of liquidity of the ABL.

So here there is the liquidity risk management and the three independent variable is the asset quality no impact on liquidity of risk management because it is insignificant and the other loan quality and funding is significant if the loan quality in bank when increase then they have no default in loan so that then the liquidity will be high. So it influence on liquidity risk management. Model prediction is 48.719 of total changes in liquidity risk management due to changes all of this changes variable and my model is also significant 0.000508.

4.4 Data Analysis for Islamic Banking

Pool: POOL

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.353820	(4,22)	0.0096
Cross-section Chi-square	17.493332	4	0.0015

Redundant fixed effects tests have been applied and the result is significant.

4.4.1 Correlated Random Effects - Hausman Test

Pool: POOL

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.764442	3	0.8580

The correlated random effects – Hausman test have been applied and the result is highly insignificant therefore, cross-section random effects are selected.

4.4.2 Time – Period Wise

Redundant Fixed Effects Tests

Pool: POOL

Test period fixed effects

Effects Test	Statistic	d.f.	Prob.
Period F	2.235273	(5,21)	0.0887
Period Chi-square	12.801294	5	0.0253

Redundant fixed effects tests have been used in the above given table and the value is insignificant i.e. 0.0887.

4.4.3 Correlated Random Effects - Hausman Test

Pool: POOL

Test period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	0.524467	3	0.9135

In the above given table, correlated random effects tests have been used and it gives a highly insignificant value i.e. 0.9135.

4.5 Final Model: Random Effects across Cross-Section and Time Period

The Final Model for Random Effects across Cross-Section and Time Period is as followed;

Dependent Variable: LRM_?
Method: Pooled EGLS (Two-way random effects)
Date: 01/10/18 Time: 18:54
Sample: 2011 2016
Included observations: 6
Cross-sections included: 5
Total pool (balanced) observations: 30
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.

C	-66.64084	42.10006	-1.582916	0.1255
AQ	-0.069361	0.065829	-1.053647	0.3017
FUN	0.796085	0.451952	1.761435	0.0899
LQ	0.048641	0.016635	2.923989	0.0071
Random Effects (Cross)				
ALBBL—C	-1.263003			
ALFBL—C	2.544050			
BIPL—C	-0.006614			
FBL—C	-0.040054			
MBL—C	-1.234378			
Random Effects (Period)				
2011—C	1.310441			
2012—C	0.776701			
2013—C	0.757841			
2014—C	-2.023218			
2015—C	-0.855544			
2016—C	0.033780			

Effects Specification		
	S.D.	Rho
Cross-section random	2.417097	0.5266
Period random	1.859982	0.3118
Idiosyncratic random	1.339006	0.1616

Weighted Statistics			
R-squared	0.381034	Mean dependent var	1.604992
Adjusted R-squared	0.309615	S.D. dependent var	1.456150
S.E. of regression	1.209907	Sum squared resid	38.06075
F-statistic	5.335173	Durbin-Watson stat	1.132418
Prob(F-statistic)	0.005335		

Unweight Statistics

R-squared	0.267099	Mean dependent var	8.820000
Sum squared resid	141.1692	Durbin-Watson stat	0.764190

The final model the dependent variable intercept value -66.64084.The asset quality in Islamic bank is insignificant and the funding is also insignificant and loan quality is significant. The r-squared is 0.309615 dependent variable changes in independent variables.Modle are prob (F-statistic) is significant.

5. Conclusion and Recommendation

The goal of this paper was to identify whether if the volatilities found the banking relationship of comparative of both the banks. So if here the evaluations of the hypothesis then the past result and my result are totally different. So here we going just the hypothesis that the author says that asset quality has positive relationship with liquidity risk management, and the other says that loan quality have a positive relationship with liquidity risk management and the funding have not positive relationship with liquidity risk management. Now I am going back the our conclusion when collect the data and run through E- views so result come the conventional banks asset quality is insignificant and the loan quality and funding significant impact with liquidity risk management. So that conclusion says that loan quality is very better if when loan quality have low default then the liquidity will be ok. And going side to the negative and when once loan quality when high then liquidity risk management high and the loan quality is significant with liquidity risk management. And giving future direction to the managers that that loan quality is significant so that the manager benefit's that he cannot losses so that manager requires to solve asset quality in future. In Islamic banks indicates that Asset quality and funding is no impact on liquidity risk management. But loan quality is significant impact on liquidity risk management.

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