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**A COMPARATIVE RESEARCH BETWEEN CONVENTIONAL  
AND ISLAMIC BANK SYSTEM OF PAKISTAN:  
LIQUIDITY RISK MANAGEMENT**

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**ABSTRACT**

*The function of the bank is differentiated into budgetary middle people, facilitator and supporters. Hence, the banks keep themselves as confided body to their trade and business partners. Assets hazard could emerge and to be seen out of such diverse tasks since they are entirely on stake in terms of accessibility. When assets are set out by the non-members supplementary actions are necessary to be taken by the Islamic banks in order to balance assets and liquidity with sharia standards. The purpose of this exploration is to find the liquidity risk associated to the dissolvability of finance based foundation in order to evaluate assets risk management via parallel evaluation between Islamic and other Pakistani banks. This paper inspects the significance of the magnitude of the bank, networking capital margin on equity, finical sufficiency plus return on Resources and Assets (RoA), along assets stake organization in conventional plus Islamic banks of the Pakistan. The investigation relays on auxiliary knowledge that is over the period of four years. For instance, during 2017-2018, the investigation explored positive, hence, less significant relationship of magnitude of the firm plus networking cash surge to net assets along with liquidity vulnerability in similar models. Moreover, financial competence share in other banks plus margin of assets in Islamic banks is found encouraging and prominent at ten percent 10% gradation equivalent.*

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**Keywords:** Comparative Study, Liquidity Risk Management, Capital Adequacy Return on Assets.

**INTRODUCTION**

The financial segment is viewed as a significant wellspring of financing for general organizations. Today the most comfortable area of hazard with customary and Islamic banks is liquidity chance. Liquidity hazard is the result of the dissimilarity including the developments of the different sides of the asset report. This difference either brings about an overabundance of money that results in an inadequacy of money that desires to be financed. Additionally, liquidity hazard surfaces from complexities in getting money at consistent expense. As loans that are based on interest are forbidden in Islamic banks, cannot make use of such funds to congregate

liquidity obligations in need. In addition, the vending of debt is not permitted (Anas & Mounira, 2008). Additional liquidity with Islamic banks can't be direct moved to customary banks as the Islamic banks don't perceive premium. On the other hand, bigger the numbers of Islamic banks and their capacities; the better will be the limit of help with this territory.

Banks are inspired by different motivations to hold a certain measure of fluid adjusts. Liquidity alludes to the capacity of the bank to get together store withdrawals, developing credit solicitation and liabilities without difficulty. Bank shields its clients lined up with issues of liquidity by enamoring in budgetary liabilities that can be depleted on interest, on the additional side of the asset report, offering devoted loaning administrations. The course of action of asset reports of banks for the most part is financed by incredibly fluid stores.

Liquidity in financial markets has multiple connotations. Liquidity signifies the aptitude of a financial firm to keep up all the time a balance between the financial inflow and outflow over time (Abdel, 2017). Likewise, in the preceding decade, worldwide growth rates of 10% to 15% per annum have been experienced by Islamic banking. In addition, their presence in over 51 countries shows the increasing pace of Islamic banking system moving into the conventional financial system (Sole, 2007).

At present, a great deal of states around the world is having twofold banking system, as interest-free banks are functioning parallel to standard banks. United Arab Emirates was the pioneer country that leads the interest-free mode of banking system. In 1973 with a paid capital of US\$ 14 million, Dubai Islamic Bank was founded. Following Dubai Islamic Bank varied interest-free banks started operations in several regions of the planet.

This paper, therefore, emphasizes the many factors to require into study putting into action associate self-made liquidity risk management, to carry out an additional incorporated structure for money markets.

#### **BANKING SECTOR IN PAKISTAN**

Revolutionary changes have been found in the Pakistani banking segment in last seventy-two (72) years. Due to some political reasons the system faced the scarcity of the finance. However, the strength and capability of State Bank of Pakistan (SBP) motivated private sector to operate monetary based organization. Moreover, the privatization with the banking sector started in 1992 encouraged indigenous financiers, also motivating the banks across the shore (Ahmad, Malik, & Humayoun, 2010). The system of banking framework in Pakistan added up to Rs.631 billion during 2009-2010, which was Rs.131 billion on average till 2014-2015. While complete resources for the financial segment added up to Rs.6197 billion out of 7821

in 2009-2010. In 2017-2018 complete resources were 8127. At present 5 Islamic banks and 24 traditional banks are taking an interest in amazingly aggressive style.

#### **Does Islamic Banking Risk Differ From Conventional Bank Risk?:**

The hazard synopsis of Islamic banks is pretty much parallel to the ordinary (premium based) banks. Then, the hazard looked by Islamic banks is ordered in two measurements. The main elements of training which are similar to regular structure, and not in conflict with the Islamic money standards, and the element of practices which are new-fangled or customized and are accepted to gather the Islamic law and standards. One such scenario is the termination of the Murabahah agreement that boosts the possibility for liquidity troubles (Gafrej & Abbas, 2017). Finding, measuring, overseeing and examining an assortment of hazard are the significant essential of liquidity hazards the executive's procedure.

Consequently, this examination is organized as pursues; the following area resulting in the presentation features significant writing. The third area characterizes the philosophy of this investigation. Factual outcomes and investigation are shown in the fourth area. The fifth segment gives significant ends.

#### **LITERATURE REVIEW**

In order to calculate loss ratio plus scheming excellence of the portfolio, an uncomplicated numerical tool by means of risk index was established for stake management (Smith, 1964). Modigliani and Pogue (1974) introduced the following measures of risk: relative measure denoted by beta plus measure of total risk indicated by the standard division. Depending on monthly value of margin the designed beta measure to be more prominent in terms of securities rating plus unsurprising for high portfolios. It has happened from 1945 to 1970.

Ahn & Lee, (2015) found that dissimilarities in the environment can cause a positive (negative) income effect that shows the way to less (extra) risk-taking by banks. Song *et.al.*, (2015) found capital ratios fruitless to limit bank's insolvency risk. Tchamyu *et.al.*, (2018) argued that method of risk estimation has very important inferences for banker and business relationships and highlighted on investing both in time and resources through risk assessment process. Chazi *et.al.*, (2018) reported that when financing capital in terms of advance interest free banks depend profoundly on their worth to face high intricacy, also tending to be moderately extra conventional in using their loanable assets than traditional banks. Clementi (2001) found a map of the inclination in strengthening the market before evaluating recommendations and suggestions on latest Basel accord plus on capital sufficiency of the banks. The study has found the returning complexity of

assets and presented some evaluation of newly expansions mainly in risk transfer method. The study focused that modernism should be treated with utmost care, and reported risk management as distinguishing goal of finance organizations.

Ghannadian and Goswami (2004) found the achievements of Islamic banks and the way Islamic banking scheme may offer liquidity also support the method of finance developing along input transaction account and discovered there is an equal charm among all the developing economies, that is the attraction of profits and losses. Gabbi (2004) stressed the dependence of stake on the institutions and organizations' place in the markets. The study further explained that assets stake can be circumscribed in the way practices are profoundly associated with the scale plus significance of monetary decisions' as the large banks have capability both to handle additional market information and to control financial scheme function. Zheng (2006) reported that short term benefits increases are dominated by liquidity stake. Frank and Krausz (2007) reported that safety measures have more importance in supporting banking system to liquidity inadequacy when studying the purpose of stock exchange as parallel function. Several dealers confirm that high liquid market places are advantageous to less number of markets (Mainelli, 2008) and said matchlessness of liquid markets is suppleness, profundity and tightness.

Zheng and Shen (2008) reported occurrence of liquidity compensational conditional margin at stake that provides an improved gauge for risk. Moreover, it recommended well-organized Monte Carlo Method that works to the portfolio of safeties. In addition to this, it unearths estimated conditional margin at risk at the capital of all percentile right from the loss sharing within a particular set of sample. Anas and Mounira (2008), recommended that Islamic banks need to fortify their risk managing practices. For example, to improve secondary market they require transparency plus liquidity. In addition to this, they can business Sukuks plus financial Takaful insurance as a means of risk-prevarication. Hassan (2009) is of the view that there are three types of hazards being experienced by Islamic banks in Brrunei Darussalam, for instance, the risk of credit, foreign exchange and the operating risk. They are handling such kind of stakes in very organized risk management's exercises that encompasses Risk Identification (RI) plus Risk Assessment and Analysis (RAA). Dinger (2009) suggested that evolving economies, as the occurrence of transactional banking and banks aggregate assets, the risk of scarcity has been reduced. They are holding low liquidity in routine but in terms of crises they hold higher liquid resources in comparison to single market banks.

Vaihekoskia (2009) explored that in the time of systematic liquidity risk, illiquidity of the stocks that serves a greater rate of return were

disapprovingly associated with the value of liquidity risk. Hence, the organized liquidity risk is not valued like an asset specific risk, however, as a large systematic risk as it is sufficient to engage all the liquidity risks. Uddin (2009) found that there is a negative association between liquidity and stock return. As the stock turns out more liquid the liquidity stake goes higher than the relative value. The institute of Islamic banks in Indonesia are examining themselves on the basis of following elements: bank liquidity management, liability side and asset side, therefore, they stand in the rating of good grade. Ismal (2010) recommended Islamic banks should enhance and revise their terms and conditions in order to maintain and balance liability and resources, convey their functions and principles to the mess make them profoundly aware of the Islamic banks' restructured administration of liquidity on assets along with liability to improve their liquidity management.

Swada (2010) explored the period of difficulties because the liquidity upset influenced the depositors, banks raise the cash holding by selling their assets in the monetary markets but not by liquidating their advances/loans. Since the banking management compensate their portfolio vigorously by selling and buying the securities in the monetary markets. Ojo (2010) stressed on the importance of stakes by all means and the major role involved by financial sufficiency. On the ground of agreed terms and conditions the study found besides general development yet there is a lot to be accomplished more specifically on liquidity risk.

#### RESEARCH METHODOLOGY

**Sample & Data Collection:** To accomplish the previously mentioned research, this paper utilizes an example of 12 banks, of which 6 are regular and 6 are Islamic banks. Information was gathered from the bank's yearly reports over the period 2006-2009. Money related information from these yearly reports is utilized to compute and to assess the liquidity chance administration in ordinary and Islamic banks of Pakistan. The complete example contained 48 bank-year perceptions.

**Research Model:**  $Y_1 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$

Liquidity hazard is the needy variable of this investigation. Clarifications of reliant and free factors alongside their intermediaries are determined in Table-A. Expressive, connections and relapse examination is applied to study and analyze the effect of autonomous factors on the reliant variable. SPSS is utilized in researching, estimating and looking at the liquidity chance for customary and Islamic banks as per their different singularity.

TABLE-A

Symbol	Variable	Proxies
A	Value of the Intercept	
$Y_1$	Liquidity Risk	Cash to Total Assets
$X_1$	Size of the Bank	Logarithm of total assets
$X_2$	Networking capital	Ratio of short-term claims less short-term debt to net assets
$X_3$	Return on Equity	Earnings Available for common stockholders/Common Stock Equity
$X_4$	Capital Adequacy Ratio	Tier 1 Capital + Tier 2 Capital / Risk Weighted Assets
$X_5$	Return on Assets	Asset Utilization Ratio = Operating Income/Total Assets
€	Error Term	

S.No.	Conventional Banks	S.No.	Islamic Banks
1	National Bank of Pakistan	1	Dawood Islamic Bank Limited
2	Allied Bank Limited	2	Bank Islami Pakistan Limited
3	The Bank of Khyber	3	Al Bakata Bank Limited
4	United Bank Limited	4	Dubai Islamic Bank Pakistan Limited
5	Habib Bank Limited	5	Emirates Global Islamic Bank
6	MCB Bank Limited	6	Meezan Bank Limited

#### STATISTICAL RESULTS AND ANALYSIS

The factual investigations of optional information have been partitioned into three measurements, for example, illustrative, corresponded and relapse. Table 1 displays elucidating measurements of the illustrative factors. The examined insights figures demonstrate the mean, standard deviation, greatest and least estimations of customary and Islamic banks. The relationship coefficients are expressed in Table 2. This gives data on the level of connection between's informative factors. The open door has been tried with the Pearson connection coefficients test. The framework clarifies that when all is said in done the relationship between's the logical factors isn't well-constructed that multicollinearity issues are not extreme. Kennedy (2008) distinguished that multicollinearity is an issue when the relationship is above 0.705.

**TABLE-1**  
**STATISTICS SUMMARY**

Descriptive Statistics (Conventional Banks)				
	Minimum	Maximum	Mean	Std. Deviation
Liquidity Risk	0.0397	0.8161	0.1185	0.1508
Size	7.4344	8.9758	8.5178	0.4871
NWC	1.2219	12.1081	3.3161	2.2180
ROE	-0.0669	1.5016	0.3709	0.3027
CAR	0.0996	0.3564	0.1565	.05411
ROA	-0.0103	0.0680	0.0308	0.0190
Descriptive Statistics (Islamic Banks)				
	Minimum	Maximum	Mean	Std. Deviation
Liquidity Risk	0	0.1577	0.0874	0.0371
Size	6.4306	8.0941	7.3098	0.4108
NWC	0.4951	8.0357	3.0016	2.8802
ROE	-0.2898	0.3080	0.0058	0.1582
CAR	0	0.6183	0.2645	0.1697
ROA	-0.0512	0.0243	-0.0039	0.0216

**TABLE-2**  
**PEARSON CORRELATION COEFFICIENTS**

Pearson Correlation Coefficients (Conventional Banks)					
	Size	NWC	ROE	CAR	ROA
Size	1	0.250	0.469	-0.625	0.617
NWC		1	0.0564	-0.490	-0.17
ROE			1	-0.313	0.480
CAR				1	-0.170
ROA					1
Pearson Correlation Coefficients (Islamic Banks)					
	Size	NWC	ROE	CAR	ROA
Size	1	0.551	0.440	-0.407	0.070
NWC		1	0.614	-0.514	0.480
ROE			1	-0.280	0.891
CAR				1	-0.131
ROA					1

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

ROE is seen as associated with ROA in Islamic Banking (Model-II). Though in customary banks these factors are superbly autonomous, as proposed by Pearson relationship coefficients. Thus the basically created models think about the result of the size of the bank, net-working capital, return on value, capital ampleness proportion and profit for resources in the

two models, for example traditional banks (Model-I), and Islamic banking (Model-II).

As indicated by the relapse results as determined in Table-3, size is sure related yet discovered unimportant with liquidity hazard in both customary and Islamic banks as the certainty level is roughly 63% and 85% individually.

**TABLE-3**  
**LIQUIDITY RISK ANALYSIS**

<b>Coefficients-Model I (Conventional Banking System )</b>					
	Un-standardized Coefficients		Standardized Coefficients	T	Sig.
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
<b>(Constant)</b>	-0.6193	0.3477		-1.2915	0.1714
<b>Size</b>	0.0371	0.0512	0.1287	0.8175	0.4039
<b>NWC</b>	0.0537	0.0181	0.9476	8.6876	0.0010
<b>ROE</b>	-0.0501	0.0721	-0.0782	-0.5725	0.5427
<b>CAR</b>	0.7108	0.3620	0.3711	1.9077	0.04166
<b>ROA</b>	0.6143	1.0778	0.0703	0.4750	0.4757
<b>R-squared</b>	0.721		<b>Mean dependent var</b>	0.11856	
<b>Adjusted R-squared</b>	0.720		<b>S.D. dependent var</b>	0.13393	
<b>Sum of squares</b>	0.130		<b>F-statistic Prob</b>	13.4670	
<b>residual</b>	2.521		<b>(F-statistic)</b>	0.00000	
<b>Durbin-Watson stat</b>					
<b>Coefficients-Model II (Islamic Banking system)</b>					
	Un-standardized Coefficients		Standardized Coefficients	T	Sig.
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
<b>(Constant)</b>	-0.2613	0.2743		-1.4150	0.2338
<b>Size</b>	0.0513	0.0472	0.4640	1.4560	0.1660
<b>NWC</b>	0.0146	0.0036	0.5292	1.4154	0.1405
<b>ROE</b>	-0.3319	0.1463	-1.4678	-2.0508	0.0472
<b>CAR</b>	0.0405	0.0479	0.2451	0.7777	0.3347
<b>ROA</b>	2.0687	1.3422	1.3916	1.8058	0.0775
<b>R-squared</b>	0.481		<b>Mean dependent var</b>	0.05946	
<b>Adjusted R-squared</b>	0.350		<b>S.D. dependent var</b>	0.04410	
<b>Sum of squares</b>	0.015		<b>F-statistic Prob</b>	3.629	
<b>residual</b>	2.405		<b>(F-statistic)</b>	0.009	
<b>Durbin-Watson stat</b>					



Net-working capital proportion is sure and profoundly irrelevant with the ward variable. The connection of profit for value (ROE) with the exploratory variable is negative however immaterial in Model-I and huge in Model-II with 95% certainty level. Capital ampleness proportion saw as decidedly related and noteworthy in the Model-I with around 95% certainty level and unimportant in model II. The needy variable is emphatically connected with profit for resources (ROA) however immaterial in Model-I and noteworthy in Model-II roughly 92% certainty level. The model embraced has a fixed impact particular (inside gathering estimator). \*Significant at the 10%, 5% and 1% level. Beta ( $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$  &  $\beta_5$ ) values speak to the proportionate change in liquidity chance because of illustrative factors, remaining change is because of obscure variables that are incorporated into mistake ( $\epsilon$ ) term. Likewise, Table-4 summarizes the indication of coefficients for every single free factor.

**TABLE-4**  
**COEFFICIENTS FOR INDEPENDENT VARIABLES**

Sign	Variables
Positive	Size, NWC, CAR, ROA
Negative	ROE

The waning elements the magnitude of the bank is categorically related. Isshaq and Bokpin (2009) explored an optimistic relativity between magnitude of the bank and liquidity. The outcomes of the study complement to the previous studies as investigated by (Swada, 2010), this study assures that the magnitude of the bank is positive plus unimportant when the cash to asset mean is utilized as a dependent variable. The ratio of networking finance is positively associated in both models the results are reinforced by (Isshaq and Bokpin, 2009). Ojo (2010) reported the worth of the capital sufficiency ratio as explained in the Basel ii accord as a technique to decrease the risk. This study discovered financial sufficiency ratio as positive but numerically prominent in traditional banks (Model-I), reinforced by (Sensarma & Jayadev, 2009). Hence, financial scarcity ratio is less significant when it comes to Islamic banks (Tarawneh, 2006) utilized margin on basis of equity as a measure for performance. Although the outcomes of this pragmatic study are in row with that of (Rosly & Zaini, 2008) who reported that margin on equity doesn't have 'imitate risk taking features'. This research paper illustrates both positive and specific association with Islamic banks; positive and insignificant with traditional banks these outcomes complement to the findings of (Siddiqui, 2008). This illustrates

that the main presentation in the factor of benefits and return confirmed they would be suggested to advantage from the end of regular banks.

This builds up that predominant presentation in components of advantages and return affirmed they would be advised to benefit from regular banks.

## CONCLUSION

The exploration used 12 banks form customary to the Islamic banks of Pakistan. Engaging association and reversion scrutinized and utilized. The facts for 2017-18 are accumulated from the institutes of banks, sites of the state bank of Pakistan and also from Lahore stock trade. The aforementioned results illustrate the wellness of the models I and II at the f-measurement of 13.467 plus 4.728 at 0% level of criticalness individually. This brings out that the two models are firmly similar. Self-directed elements have positive, but insignificant connections: magnitude of the bank plus, networking financing to network assets in the two models. The capital adequacy share in the traditional banks and margin for assets are there in Islamic banks for sure with the 11% of outstanding level. In terms of expansion of connection of margin for assets in traditional banks and the capital adequacy share in Islamic banks have found positive but inconsequential. It has been found that conventional banks in Pakistan were increasingly inclined whilst in transit to consider schemes along with a long haul financing. Similarly, the valuation discovered that unparalleled demonstration in components of margin and benefits assured that they would be sane to output and liquidity, in comparison to Islamic banks. This study gives the vivid picture of banking segment of Pakistan right from its foundation. It motivates the researchers, academicians more especially to financiers and investors to have unambiguous description of financial advancements in foreign liquidity risk, since the study presents the exploration of traditional banking towards Islamic banking to enhance their view point for liquidity chance management.

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