



**A DISSERTATION
ON
Liquidity Risk Management in Islamic Banks: An
Empirical Study with Special Context of Pakistan**



A thesis submitted to the Superior College, Lahore in partial
fulfillment of the requirements for the degree of
Doctor of Philosophy in Business Administration

Submitted by:

Salman Masood
Roll # PDBA 13110
Session 2012-2015
Department of Business and Management Sciences

Supervised by:

Prof. Dr. Ahmad Raza Bilal
Prof. Dr. Muhammad Ilyas



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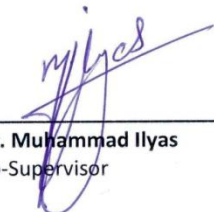
Approved by:



Dr. Ahmad Raza Bilal
Supervisor



Mr. Kashif Mahmood
Program Manager of Research Degrees



Dr. Muhammad Ilyas
Co-Supervisor



The Superior College
Faculty of Business and Management Sciences, Lahore, Pakistan

**DECLARATION TO BE FILLED BY THE STUDENT AT THE TIME OF SUBMISSION OF THESIS
TO THE SUPERVISOR AND/OR FOR EXTERNAL EVALUATION**

Section 1: Particular of the Student		
1.1	Full Name	Salman Masood
1.2	Father's Name	Masood Sajjad
1.3	Roll. Number	PDBA – 13110
1.4	Program	Doctor of Philosophy in Business Administration

Section 2: Particular of the Thesis		
2.1	Title	Liquidity Risk Management in Islamic Banks: An Empirical Study with Special Context of Pakistan
2.2	Supervisor's Name	Dr. Ahmad Raza Bilal
2.3	Co-Supervisor's Name	Dr. Muhammad Ilyas
2.4	Date of Completion	



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SUPERVISOR'S CERTIFICATE ON
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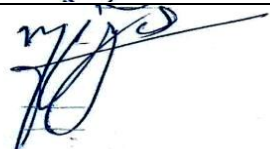
Section 1: Particulars of the Supervisor and Co-Supervisor		
1.1	Full Name (Supervisor)	Dr. Ahmad Raza Bilal Assistant Professor Research Degrees
1.2	Address	The Superior College, Faculty of Business and Management Sciences, Lahore.
1.3	Full Name (Co-Supervisor)	Dr. Muhammad Ilyas Dean of Research
1.4	Address	The Superior College, Faculty of Business and Management Sciences, Lahore.

Section 2: Particulars of the Student		
2.1	Full Name	Salman Masood
2.2	Father's Name	Masood Sajjad
2.3	Registration Number	PDBA – 13110
2.4	Program	Doctor of Philosophy in Business Administration

Section 3: Particulars of the Thesis		
3.1	Title	Liquidity Risk Management in Islamic Banks: An Empirical Study with Special Context of Pakistan
3.2	Date of Completion	November 13, 2016

We certify that:

- The above named student has completed the cited thesis under our guidance and supervision.
- We am satisfied with quality of the student's research work, and
- We consider it worthy of submission for external evaluation.

4.1	Supervisor's Full Name and Signature	Dr. Ahmad Raza Bilal	
	Co-Supervisor's Full Name and Signature	Dr. Muhammad Ilyas	
4.2	Date		

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3.2	Date	

Dedication

This work is dedicated to my supervisors, parents, wife and sweet little daughters because of their prayers and love I am successful in my life. May Allah give them a long and healthy life, Amen.

Acknowledgement

All praise is for Almighty Allah (the most merciful, the most beneficial), Who enabled me to complete this research thesis. I express my gratitude to Him from the core of my heart. All respects to the Holy Prophet (Peace Be Upon Him) who enabled us to recognize our Creator and whose spiritual teachings guide us in every matter of our lives.

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Salman Masood

Table of Contents

Declaration of Originality	
Dedication	
Acknowledgement	
List of Tables	
List of Figures	
List of Acronyms	
Abstract	

Chapter 1 Introduction

1.1 Background	01
1.2 Problem Statement	06
1.3 Significance of Study	07
1.4 Potential Causes of Liquidity Risk	12
1.5 Objectives of the Study	14
1.6 Research Questions	14
1.7 Scope of the Study	15
1.8 Conceptualization of Variables	17
1.9 Structure of the Thesis	21

Chapter 2 Literature Review

2.1 An Introduction of Financial Institutions	25
2.2 Liquidity Risk in Banking Institutions	26
2.2.1 Nature of risks in banks	26
2.2.2 Nature of liquidity risk in the banking sector	28
2.3 Liquidity Risk Management Process	31
2.3.1 Liquidity management policies	32
2.3.2 Asset Liability Committee (ALCO)	33
2.3.3 Effective information management system	35
2.3.4 Liquidity management internal control system	37
2.4 Maturity Mismatches and Asset-Liability Imbalances	38
2.4.1 Determinants of maturity mismatch risks & asset-liability imbalance	39
2.4.2 Consequences of maturity mismatch and asset-liability mismatch	40
2.4.2.1 <i>Insolvency risk</i>	41
2.4.2.2 <i>Reputational risk</i>	41
2.4.2.3 <i>Government takeover risk</i>	41
2.5 Mitigation of Liquidity Risk	42
2.5.1 Devising a contingency funding plan (CFP)	45
2.5.2 Matching cash flows and maintaining liquid assets	46
2.5.3 Structure of bank	47
2.5.4 Deposit insurance	49
2.6 Liquidity and Financial Instruments	49
2.7 Liquidity Risk Management: Sharia Perspective	54
2.8 Islamic Banking and Liquidity Risk Issues	55
2.8.1 Nature of Islamic banks and liquidity risk	55
2.8.2 Risks faced by Islamic banks	57
2.9 Liquidity Risk Management: Sharia Perspective	61

2.9.1 Challenges to liquidity risk management	62
2.9.1.1 <i>Liquidity management issues on liability side</i>	64
2.9.1.2 <i>Liquidity management issues on asset side</i>	66
2.9.2 IFSB guidelines for liquidity risk management	66
2.9.2.1 <i>General requirements</i>	67
2.9.2.2 <i>Liquidity risk</i>	67
2.10 Liquidity Risk Management: Sharia-Based Approach	70
2.10.1 Liquidity risk management & role of entrepreneurs and depositors	70
2.10.2 Liquidity risk management: Roles of Islamic banks	72
2.11 Monitoring and Measurement of Liquidity Risk	72
2.12 Sharia-based Islamic Banking Operations	73
2.12.1 Sharia-based liability management	74
2.12.2 Sharia-based asset management	75
2.13 Mitigation of Liquidity Risk: Sharia Perspective	76
2.13.1 Tackling regular demand for liquidity	77
2.13.1.1 <i>Maintenance of liquidity reserves</i>	77
2.13.1.2 <i>Sequencing the maturity time of deposits</i>	77
2.13.1.3 <i>Profit and loss sharing mechanism</i>	78
2.13.1.4 <i>Avoiding defaults in debt-based contracts</i>	78
2.13.1.5 <i>Entering into liquidity agreement with parent company</i>	79
2.13.2 Tackling predictable irregular demand for liquidity	79
2.13.2.1 <i>Sales of short-term Islamic securities</i>	79
2.13.2.2 <i>Sales of long-term Islamic securities</i>	80
2.13.2.3 <i>Opting for Islamic money market</i>	81
2.13.3 Tackling the unpredictable irregular demand for liquidity	81

Chapter 3

Research Methodology and Method

3.1 Introduction	84
3.2 Research Methodology	86
3.2.1 Quantitative research methodology	86
3.2.2 Qualitative research methodology	87
3.2.3 Research methodology of the PhD thesis	88
3.3 Research Method	88
3.3.1 Quantitative method	89
3.3.2 Qualitative method	89
3.3.3 Research method of the PhD thesis	90
3.4 Research Design	91
3.5 Research Strategy	92
3.5.1 Questionnaires and respondents	93
3.5.2 Designing the questionnaire	95
3.5.3 Primary data collection process	96
3.5.4 Merits and demerits of data collection through questionnaires	98
3.5.5 Pilot study	98
3.6. Secondary Data Analysis	101

Chapter 4

Secondary Data Analysis for Liquidity Models

4.1 Dynamics of Liquidity of Islamic banks: An Econometric Analysis	108
4.1.1 Estimating Asset Model	109
4.1.1.1 <i>Descriptive: Asset Model</i>	109
4.1.1.2 <i>Estimation of model: Asset Model</i>	111
4.1.2 Estimating Liability Model	117
4.1.2.1 <i>Descriptive: Liability Model</i>	117
4.1.2.2 <i>Model estimation: Liability Model</i>	120
4.1.3 Estimating Liquidity Reserve Model	125
4.1.3.1 <i>Descriptive: Liquidity Reserve Model</i>	125
4.1.3.2 <i>Model estimation: Liquidity Reserve Model</i>	127

Chapter 5

Primary Data Analysis for Islamic Bankers and Depositors

5.1 Liquidity Management in Banks: Questionnaire Survey Results	133
5.1.1 Questionnaire responses of depositors	133
5.1.1.1 <i>Education level of the respondents</i>	133
5.1.1.2 <i>Awareness and usage of Islamic banking</i>	134
5.1.1.3 <i>Intentions of Islamic depositors</i>	135
5.1.1.4 <i>Depositors' opinions on reasons for closing their account</i>	138
5.1.1.5 <i>Remarks on the depositors' opinions</i>	140
5.1.2 Questionnaire responses of bankers	141
5.1.2.1 <i>Organizational structure of Islamic banks</i>	141
5.1.2.2 <i>Liquidity risk mgt practices in Islamic banks of Pakistan</i>	143
5.1.2.3 <i>Remarks on Islamic bankers' opinions</i>	147

Chapter 6

Qualitative Data Analysis for Liquidity Measures

6.1 Liquidity Management Issues in Islamic Banks: A Qualitative Data Analysis	149
6.1.1 Analysis of the Islamic bankers' interviews	149
6.1.1.1 <i>Liquidity</i>	149
6.1.1.2 <i>Regulators and liquidity management</i>	151
6.1.1.3 <i>Liquidity management in Islamic banks</i>	154
6.1.1.4 <i>Bank structure</i>	161
6.1.1.5 <i>Marketing</i>	162
6.1.1.6 <i>Islamic image of Islamic banks</i>	170
6.1.1.7 <i>Comments</i>	175
6.1.2 Analysis of Islamic banks' depositors' interviews	177
6.1.2.1 <i>Islamic banking products and usage</i>	177
6.1.2.2 <i>Depositors' conception of Islamic banking</i>	179
6.1.2.3 <i>Islamic image of Islamic banks</i>	184

6.1.2.4 <i>Satisfaction with Islamic banks</i>	189
6.1.2.5 <i>Customers prefer Islamic banks to conventional banks</i>	190
6.1.2.6 <i>Marketing</i>	193
6.1.2.7 <i>Comments</i>	195

Chapter 7

Discussion and Synthesis

7.1 Discussion on Econometric Analysis	197
7.1.1 Results and discussion of asset model	198
7.1.2 Results and discussion of liability model	201
7.1.3 Results and discussion of liquidity reserve model	202
7.1.4 Overall results and discussion of econometric analysis	204
7.2 Discussion on Survey (Questionnaire) Analysis	206
7.2.1 Discussion of depositors' responses – questionnaire survey	206
7.2.2 Discussion of Islamic bankers' responses – questionnaire survey	209
7.2.3 Overall discussion on survey (questionnaire) analysis	211
7.3 Discussion on Qualitative Analysis	212
7.3.1 Discussion of Islamic bankers' responses	212
7.3.2 Discussion of Islamic bank depositors' responses	215
7.4 Overall discussion and synthesis	217

Chapter 8

Conclusion, Recommendations and Future Research Directions

8.1 Conclusion	221
8.2 Recommendations	225
8.3 Limitations of the Study	228
8.4 Directions for Future Research	229

Reference	231
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Appendix – I	248
Questionnaire relating to Islamic bankers	

Appendix – II	251
Questionnaire relating to Islamic depositors	

Appendix – III	254
Qualitative interviews guide – Islamic depositors	

Appendix – IV	260
Qualitative interviews guide – Islamic bankers	

Appendix – V	266
Themes and thematic analysis	
Qualitative semi-structured interviews	

List of Tables

Table 2.2.2.1 External and internal factors related to banks' liquidity risk	30
Table 3.1 Methodology of research studies	85
Table 3.2 Reliability statistics of questionnaire of Islamic bankers	101
Table 3.3 Reliability statistics of questionnaire of depositors to Islamic banks	101
Table 4.1.1.1 Descriptives: Asset Model	111
Table 4.1.1.2.1 Fixed effect model estimation: Asset Model	112
Table 4.1.1.2.2 Random effect model estimation: Asset Model	112
Table 4.1.1.2.3 Hausman Specification Test: Asset Model	114
Table 4.1.1.2.4 Pearson' Correlation Coefficient Matrix	115
Table 4.1.1.2.5 Serial Correlation	116
Table 4.1.1.2.6 Residual Cross-Section Dependence Test	116
Table 4.1.2.1 Descriptive: Liability model	118
Table 4.1.2.2.1 Fixed effect estimation: Liability Model	121
Table 4.1.2.2.2 Random effect estimation: Liability Model	121
Table 4.1.2.2.3 Hausman Specification test: Liability Model	122
Table 4.1.2.2.4 Pearson' Correlation Coefficient Matrix	123
Table 4.1.2.2.5 Serial Correlation	124
Table 4.1.2.2.6 Residual Cross-Section Dependence Test	124
Table 4.1.3.1 Descriptives: Liquidity Reserve Model	127
Table 4.1.3.2.1 Fixed Effect model estimation: Liquidity Reserve Model	128
Table 4.1.3.2.2 Random Effect model estimation: Liquidity Reserve Model	128
Table 4.1.3.2.3 Hausman Specification Test: Liquidity Reserve Model	130

Table 4.1.3.2.4 Pearson' Correlation Coefficient Matrix	131
Table 4.1.3.2.5 Serial Correlation	131
Table 4.1.3.2.6 Residual Cross-Section Dependence Test	132
Table 5.1.1.1 Education distribution of depositor respondents	134
Table 5.1.1.2 Depositors' awareness and their usage	135
Table 5.1.1.3 Intentions of the depositors	136
Table 5.1.1.4 Descriptive Statistics of Depositors	139
Table 5.1.2.1 Organizational structure in Islamic banks	142
Table 5.1.2.2 Liquidity risk management practices in Islamic banks of Pakistan	144

List of Figures

Figure 1.1 Liability Model	17
Figure 1.2 Asset Model	18
Figure 1.3 Liquidity Reserve Model	20
Figure 2.3.3.1 Liquidity information system in a typical bank	36
Figure 2.4.1 A representation of liquidity need and liquidity gap	38
Figure 2.8.1.1 Nature of Islamic banks and liquidity risk	56
Figure 2.8.2.1 Risks faced by Islamic banks	59
Figure 3.4.1 Research design	92

List of Acronyms

%RS	percentage of revenue sharing on deposits
ADBP	Agricultural Development Bank of Pakistan
ADF	augmented Dickey–Fuller
ALCO	Asset Liability Committee
ATM	automatic teller machine
BA	banker’s acceptance
BIS	Bank for International Settlements
BOD	board of directors
CAR	capital adequacy ratio
CEO	chief executive officer
CFP	contingency funding plan
CO	cost of banking operations
DFR	income from operational financing
E-Views	Econometric Views
GBP	Great Britain Pound
HBL	Habib Bank Limited
ICP	Investment Corporation of Pakistan
IDBP	Industrial Development Bank of Pakistan
IFSB	Islamic Financial Services Board
IIFM	International Islamic Financial Market
IPO	initial public offering
IRR	investment risk reserve
KIBOR	Karachi Interbank Offer Rate
LSD	lag of total Islamic deposits
LSM	least square method
LTLR	lag of total liquidity reserve
MCB	Muslim Commercial Bank

NOP	non-operational financing
NPL	non-performing loan
PAA	prudential allocation of assets
PBUH	Peace Be Upon Him
PDF	investment in operational finance
PER	profit equalization reserve
PLS	profit-and-loss sharing
ROA	return on assets
ROE	return on equity
RPA	return sharing paid to depositors
SBP	State Bank of Pakistan
SD	Islamic deposits
SPSS	Statistical Package for the Social Sciences
Std. Dev.	standard deviation
TLR	total liquidity reserve
USD	United States Dollar

Abstract

According to the general perception there is a close contact among finance, financial institutions and economic development. An improvement in a country's money-related framework would provoke economic development and an increase in its national income. The money related framework is based on Islamic and Conventional banking in Pakistan. Liquidity is an important aspect of Pakistani Islamic banking system. In liquidity management system, deposits and Islamic bankers are involved. This research is aimed at analyzing the behavior of Islamic depositors and the management techniques of Islamic bankers to adjust liquidity issue along with the factors that affect the liquidity of the Islamic banks of Pakistan. The main aims of the research are to analyze the liquidity behavior of depositors of Islamic banks of Pakistan, secondly to examine the Islamic banks' liquidity management system (i.e. current practices to manage liquidity) and organizational structure and to identify the factors that influence liquidity of Islamic banks. For the accomplishment of the said aims first of all, a conceptual framework was developed through a literature review. Then this conceptual framework was tested using primary and secondary data along with interviews conducted with depositors of Islamic banks and Islamic bankers of Pakistan. Three types of data were collected for the study: quantitative data from the annual reports of the Islamic banks, quantitative data from close-ended questionnaires from both depositors and Islamic bankers in Pakistan, and qualitative data from semi-structured interviews with both depositors and Islamic bankers in Pakistan. after the collection of data different tests were applied to the primary and secondary data to derive the results. These were Descriptive Tests i.e. Mean, Median, Mode, Standard Deviation, Pool Unit Root Test, Panel Data Analysis (for each of the three models separately), Regression test i.e. Simple and multiple regressions using Fixed effect and Random effect. The findings of the study

indicate that Islamic banks rely on various formal and informal mechanisms in order to manage their liquidity. Both investment and deposit sides are managed in this regard whereby the deposit side is mostly managed by attracting more depositors. In this regard there was an indication of two types of cohorts of Islamic banks' depositors. The first cohort has a religious orientation and is attracted towards Islamic banks because of their Islamic image and the second cohort has profit orientation and is attracted in expectation of higher returns. In order to yield higher profits banks have to invest more in long-term investments based on Mudarabah and Musharakah. Further, in order to maintain liquidity, banks also invest in NOP options. The more the liquidity of the bank, the more it would be able to invest in long-term investments. There are cost implications as well, as profit-oriented customers require higher returns and, thus, the cost of banking operation increases with depositors having high profit orientation. Religious depositors, on the other hand, are easy to attract and retain without any significant operating cost. Such depositors just assess the operations and investments of the banks on Islamic standards and deposit their money in the Islamic banks. In the broader context the main recommendations are, Islamic banks should strengthen their Islamic image and customer service along with profit sharing.

Key Words: Islamic Banking, Liquidity Risk, Liquidity Reserves, Shariah Principles, Demand for Liquidity.

Chapter 1

Introduction

1.1 Background

With the growth in economy, worldwide finance-related markets have made an expedient dynamic move towards progress in recent decades. Finance related markets and banks have been generally perceived as indicators of a developing economy by governments and academics (Onder & Ozyildirim, 2013). According to the general perception there is a close contact among finance, financial institutions and economic development. In 1912, Joseph A. Schumpeter stated that an improvement in a country's money-related framework would provoke economic development and an increase in its national income (Levine, 1993). A study by Bittencourt (2012) explored the function of financial progression in creating economic development in four Latin American nations between 1980 and 2007; their findings affirmed Schumpeterian theory. Finance enables an entrepreneur to invest in new ventures (Schumpeter, 1912); financial development leads to economic progress, capital accretion and practice development (Levine, 1993). An investigation conducted by Goldsmith in 1969, in which information was collected from 35 nations confirmed that there is a positive relationship between the development of money and capital financial markets with the progression of an economy. Other studies also demonstrated the same findings (e.g., Shortland, 2012; Hasan, Wachtel & Zhou, 2009; Hao, 2006; Levine, 1998). Financial institutions are considered to be the back bone for the economic development of a country.

Commercial banks play a vital role in financial development. They have a bridging role between lenders and depositors. Scheduled commercial banks create credit by borrowing from depositors

and lending to borrowers. In fact, contemporary scheduled banks have turned into finance channels for the capital business sector in different economies (Keeton *et al*, 2003). These banks have not only enabled credit creation but have also improved the financing process.

The economy of Pakistan is based on two important societal schools of thought: capitalist and Islamic. There are two factors of production: capital and entrepreneur. Capital is entitled to risk-free interest and an entrepreneur is entitled to profit. The capitalist school of thought views both factors as separate, but in the Islamic school of thought the owner invests capital to earn profits and bears all risk of losses. Therefore, in a capitalist economy, conventional banks deal in money and reward in interest whereas in an Islamic economy, banks deal in money and reward in profits and risks of losses because *riba* (interest) is forbidden in such an economy.

The banking sector economy is dependent upon financial institutions such as development banks (e.g. Habib bank limited, Agricultural Development Bank of Pakistan, ADBP; and Industrial Development Bank of Pakistan, IDBP), financial corporations such as Investment Corporation of Pakistan (ICP), and schedule banks of State Bank of Pakistan (SBP; i.e. conventional interest-based banks such as Muslim Commercial Bank (MCB), Allied Bank of Pakistan, United Bank Limited and Islamic banks like Meezan Bank Limited and Burj Bank Limited). These financial institutions not only contribute in credit creation but also provide short, medium and long-term loans for the development of different important sectors of the country.

According to a SBP report (2011–12), the total Islamic bank deposits in Pakistan up to June 2012 were Rs. 581.2 billion and that of conventional banks were Rs. 5638.2 billion. One reason for

such a huge difference may be that Islamic banking has not yet matured; the first Islamic bank (i.e. Meezan Bank Limited) was inaugurated in 2003. There may be other reasons for this difference, such as bankers' lack of understanding of Islamic banking products (i.e. *Mudarabah*, *Musharakah*, *Ijara*, *Takaful*, *Murabaha*, *Bai salam*, diminishing *Musharakah* etc.), less customer awareness and understanding of Islamic banking products and principles, and customer perception regarding interest-free and interest-based banking products.

According to Saeed (2011), Islamic banking has two possible strategies: revolutionary and evolutionary. In Pakistan, Islamic and commercial banks can offer their products at the same time and it will be at the discretion of potential customers to make transactions either with one or both banks, hence SBP allowed the evolutionary strategy for the introduction of Islamic banking in 2003 (Saeed, 2011).

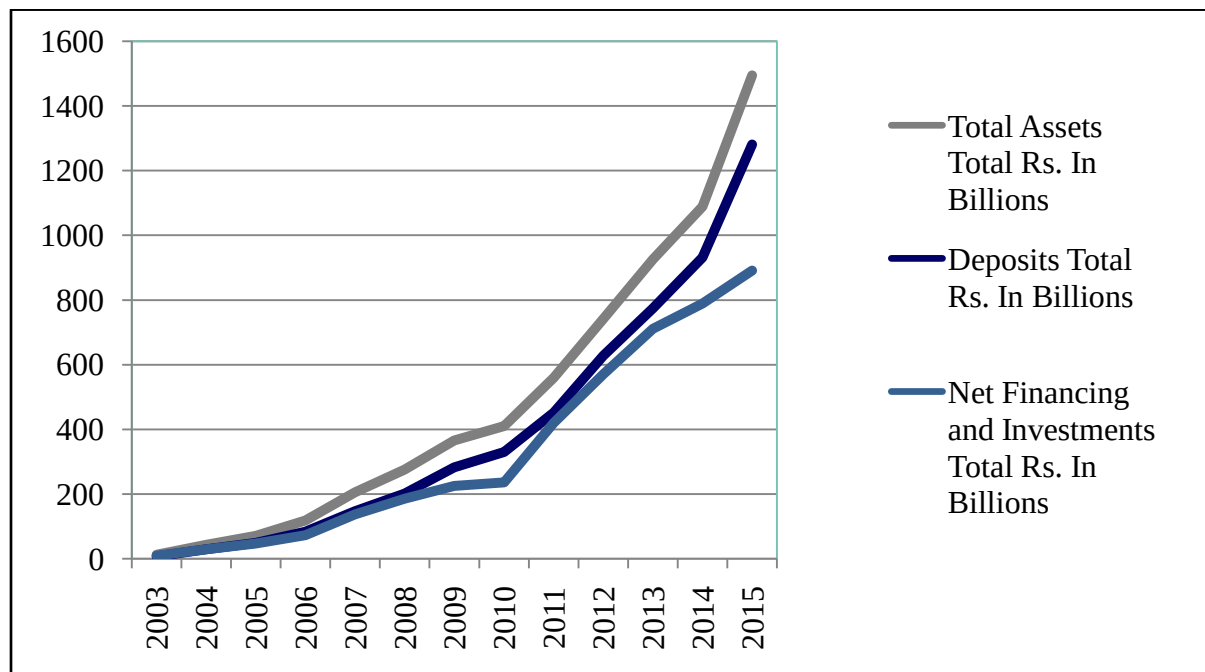
In the light of SBP policy, Saeed (2011) argued that Pakistan has full-fledged Islamic banks and standalone branches that facilitate potential investments and funds management for customers. According to a SBP report (2011–12), there are 574 and 300 full-fledged and stand alone branches of Islamic banks respectively in Pakistan.

Growth momentum of the Islamic banking industry (IBI) continued from 2003 to 2015, both assets and deposits witnessed increases. Assets of IBI grew by 1% to 11.3 % from year 2003 to 2015. Similarly Deposits of IBI grew by 1% to 12.8 % from year 2003 to 2015. In 2003 the deposits were of 8 billion but in year 2015 the amount was raised to 1281 billion rupees. Similarly financing and investments of IBI grew by 1% to 10.2 % from year 2003 to 2015. In

2003 the financing and investments were of 10 billion but in year 2015 the amount was raised to 891 billion rupees.

Years	Total Assets		Deposits		Net Financing & Investments	
	Total Rs. In Billions	Share of IBI %	Total Rs. In Billions	Share of IBI %	Total Rs. In Billions	Share of IBI %
2003	13	1	8	1	10	1
2004	44	2	30	1	30	1
2005	71	2	50	2	48	2
2006	119	3	84	3	73	2
2007	206	4	147	4	138	4
2008	276	5	202	5	186	4
2009	366	6	283	6	226	5
2010	411	6.1	330	6.4	236	4.6
2011	560	7.3	452	7.6	420	7.0
2012	742	8.1	628	9.3	571	7.8
2013	926	9.5	775	10.1	711	9.1
2014	1089	9.8	932	10.6	789	9.6
2015	1495	11.3	1281	12.8	891	10.2

Islamic banking bulletin 2003-2015



As the industry is undergoing a period of rapid growth, it has to be accompanied by a robust liquidity risk management (Ismal, 2010).

Islamic economics is a complete system that is based on the concepts of equality, sympathy, kindness and unity of human beings. Historically, the Holy Prophet (Peace Be Upon Him; PBUH) established the first Islamic state in Medina in the seventh century, and he checked and participated in business activities. Later, pious caliphs and the followers of the Holy Prophet (PBUH) followed the system of Islamic economics which was based on the tenets of Islam. Well-known scholars and jurists who contributed to this system at that time were Abu-Yusuf (731–798), Al-Shiabani (750–804), Ibn-Hazam (994–1064), Tusu (1201–1274), Ibn-Taimiya (1262–1328) and Ibn-Khuldun (1332–1406). Later, in this present age, Islamic economics was developed on the pattern of Islamic teachings due to the untiring and relentless efforts of Qureshi (1946), Ahmad (1952), Uzair (1955), Maududi (1961), Al-Arabi (1966), Siddiqi (1967), Al-Sadr (1974) and Kahf (1978). The start and evolution of contemporary Islamic banking and finance is the result of Islamic economics.

In Pakistan, the Islamic banking and finance movement could not get its expected results in the early 1980s due to the slow pace of development, which led to it not fulfilling people's hopes and it lost its core importance. Evidently, the Islamic banking system cannot work independently of the teachings of Islam; Islam plays a vital role in sociopolitical and economic environments, but this concept was overlooked when the Islamic banking and finance system was brought about.

Liquidity is an important aspect of Pakistani Islamic banking. This research aimed at analyzing the mechanism of management of liquidity and liquidity-related risks for Islamic banks. Liquidity risk can be managed by banking assets and the liability side of the balance sheet. The

main objectives of this study were to analyze the liquidity management of Islamic banks, the liquidity and cash handling behavior of depositors, and to design a liquidity management program. It is hoped that this study will help to improve liquidity risk management practices and that it will be helpful to Islamic banks.

1.2 Problem Statement

The Islamic banking sector is a growing part of the current financial system of Pakistan. However, its pace of improvement is not very fast so it is necessary to measure the variation in liquidity (i.e. liquidity risk) and how vital liquidity is to Islamic banks. Variation in liquidity should be evaluated and its consistency will show the stability of Islamic banking and how much it is contributing towards the economy. In the financial economic system, the central commercial and Islamic banks play a vital role between depositors and lenders. They act as facilitator and supporter for financial transactions. The Islamic banks and commercial banks accept deposits from businesses and individuals, which create credit, and they pour this credit into the economy, which improves the economic factors of production. Therefore, the Islamic banks not only create credit for businesses but also improve the national income of the country. Due to such diversification, banks can be exposed to a shortage of funds; hence, they can face liquidity risk. Therefore, in the management of liquidity risks, it often becomes essential for the banks to convert the financial assets of their balance sheet into liquid assets and readily available funds to meet the needs of liquidation applied by depositors. In addition, the Islamic banks also have to meet the Shariah compliancy and guidelines.

Hussain and Al-Ajmi (2012) stated that liquidity risk is found to be vital risk faced by Islamic banks. Secondly the Islamic banking industry is required to comply with the standardized approach of risk measurement (Hassan, 2009). The State Bank of Pakistan has also devised the strategic plan to develop liquidity management framework till 2017 (SBP, 2014-2018). On the basis of above parameters following are the problem statement for this research work.

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

1.3 Significance of Study

The variables selected by the researcher are return sharing paid to depositors, income from operational financial, cost of banking operation, lag of total Islamic deposits for liability model. For asset model different variables selected as return sharing paid to depositors, income from operational financial, cost of banking operation, and profit from non-operational financing. The liquidity reserve model have variables like total investments in all financing, total profit from operational financing, percentage of revenue sharing on deposits, and lag of total liquidity reserve. The method applied by the researcher for analysis is quantitative and qualitative. Primary and secondary data is tested and confirmation is made through interviews for the results. The fixed and random effect model is applied on the secondary data and frequency distribution model is applied on the primary data. Thematic analysis is made on the interviews for generation and analysis of themes. The gap is identified by the help of the following studies of different researchers.

Financial assets and liabilities have a significant effect on Islamic banks' liquidity risk (Ramzan & Imran, 2014). This study is to measure the liquidity risk in Islamic banks of Pakistan through different domains such as capital adequacy ratio (CAR), return on assets (ROA), return on equity (ROE), networking capital and assets of balance sheet. A quantitative research methodology is used to determine the results. Five years of secondary data from Islamic banks of Pakistan for the period 2007 to 2011 were analyzed and different tests were applied, such as least square regression.

Different variables were tested as independent variables that can affect the liquidity risk; these variables were ROE, ROA, CAR, size of bank and lastly the non-performing loans (NPLs) of the banks. The study was based on secondary data and the data were from the year 2007 to 2011. (Anjum Iqbal, 2012).

Sajid, Adeel and Musarrat (2012) for this study an adaptive questionnaire was used. The independent variables used were: risk management practices, risk identification, risk assessment, monitoring risk upon liquidity and credit risk.

There were two different independent variables that were assumed to have an effect on credit risk management: bank size and liquid assets of the banks. Secondary data collected from various sources from the period 2001 to 2010 were used for this study. Different tests were used in the study: augmented Dickey–Fuller (ADF) test for reviewing stationarity of the data, Johansson's co-integration test was run for analyzing long-term relationships and ordinary least squares technique was used with a regression model for analyzing coefficients.

Anas and Fauziah (2014) conducted research on credit and liquidity risk by analyzing different independent variable as risk relating rate of interest, ROA as proxy for profitability of Islamic banks. The secondary data was from the year 2004 to 2011 and secondary data were collected from the annual financial reports of different banks. The panel data analysis was made with generalized least square method (LSM).

A study conducted by Nazik *et al.* (2014) investigated the different variables that effect credit-based risk in Pakistani Islamic banks. After testing the variables the researchers drafted a conceptual framework for minimizing the credit risks that affect the performance of Islamic banks but no framework was devised. This study suggested how credit risks can be minimized by the Islamic banks of Pakistan through different parameters.

Naveed *et al.* (2013) conducted another study on risk management practice for Islamic banks using five independent variables: risk monitoring, risk identification, understanding risks and its parameters, risk assessments and analysis of credit risk upon a dependent variable namely risk management practice. Naveed and Farhan (2011) conducted a study on secondary database quantitative paradigm from the period 2006 to 2009. These financial indicators were: asset management, NPL leverage of Islamic finance, size of the banking transaction and CAR. These financial indicators were considered independent variables.

An exploratory study by Rukhar *et al.* (2011) was made using a qualitative paradigm. In this study, interviews were conducted with six top-level persons and questionnaires were distributed for data collection. Different areas were explored in the interviews: distinguishing features of

Islamic banking, challenges that are facing Islamic banks, financial product development and forwarded marketing and comparison of Islamic and commercial banks. The thematic analysis and results of the study showed that in Pakistan Islamic banking has the potential to grow.

Hassan (2009) aimed to show how the banking system (conventional and Islamic) evaluates risk. There can be different risks: liquidity, credit or operational. These variables were required return and its percentage, equity, investment and different types of risks as explained earlier. Such risks can be mitigating through the help of corporate governance of the country. Faizan (2014) evaluated the risk management strategies of Islamic and commercial banks. Faizan (2014) also evaluated the differences in liquidity, operational and credit risk management in relation to commercial and Islamic banks (Faizan, 2014).

Furthermore this research is significant because it contribute in literature and practice. The theoretical implications are given as follows

- i. The concept of institutional deepening and restructuring of assets and liabilities side for liquidity management in Pakistani context are not specifically found in the literature. Therefore it makes a significant contribution in the knowledge and understanding in the liquidity risk management.
- ii. The factors affecting liquidity risk will contribute in the existing literature i.e. factors relating to asset, liability and liquidity reserve models

The practical implications and significance is given hereunder:

- i. This study will help SBP to develop liquidity management framework including development of Islamic interbank market.

- ii. Practically IBIs need to identify any future shortfalls in liquidity by constructing maturity ladders based on appropriate time bands so this study will provide different factors that affect the liquidity short falls like asset, liability and liquidity reserve model variables.
- iii. When calculating net funding requirements (NFR), a substantial influence on the liquidity situation of IBIs relates to the management of their PLS deposit holders' expectations so this study will provide the behavior of depositors that why they withdraw amounts before maturity.
- iv. This study will help IBI that how to attract more customers by studying their intentions for investments
- v. This study will help the Islamic banking institutions (IBIs) to draft their liquidity management policies and procedures

Due to cash inflows and outflows (i.e. funds management), the Islamic bank, measure and monitor the funds management of bank. In such fund management, the off-balance sheet items are also evaluated and adjusted. Besides that, Islamic banks need liquidity for the withdrawal of deposits by depositors so there is a great need for managing liquidity risk. In Islamic banks, there are several different approaches to the measurement of liquidity: indicator of liquidity, source and application of fund and structure of funds approach. A shortfall or excess of liquidity can be observed from the net cash flow deficit or surplus at a particular time period. A deficit of cash flow can be overcome by other sources that also generate cash. The banks ought to review the money streams because they are occupied with off-balance sheet activities (e.g. if the outflow of funds is considered then the contingent liabilities can play a vital role because the options and financial sources are the major some of outflow of cash). Subsequent to recognizing the liquidity

necessities, a profession of more awful case situation can be examined to evaluate both bank particular stuns and economics stuns. The bank ought to have possible financing arrangements to take care of liquidity needs to overcome these emergencies. Also, liquidity should be managed and measured if the bank is dealing in foreign currency because it can also create a liquidity risk issue. Therefore, banks should exert strong control over liquidity risk management; they should continuously review their policy of liquidity risk and measure it from time to time because early identification and evaluation will mitigate the liquidity risk. For early identification and evaluation it is necessary to review and establish policies and procedures and submit regular review reports on liquidity and liquidity-related matters. Also it is necessary that an internal audit department should perform regular audits of liquidity and its processes and evaluate the issues and problems of policies, procedure and application.

1.4 Potential Causes of Liquidity Risk

Islamic banks and financial institutions face risk that is considered liquidity risk (Duffie & Singleton, 2003). The liquidity risk is generally referred to as the risk of liquidity withdrawal of heavy amounts by depositors before its time of maturity. An investigation revealed that for Islamic banks the liquidity risk is higher than credit, operational and market risks. Banks are usually exposed to a liquidity risk of upto 60% and other all risk that are fatal to financial institution are up to 40%. Therefore major risk is considered as liquidity risk in Islamic banks (Mckinesy & Company, 1997).

Liquidity risk management is always at the center of attention of the administration bodies of the country and banks (i.e. governments, regulatory bodies etc.); in the modern era the financial

economy is based on the trust of different institutions and individuals. By trust we mean that the repayment of loans, interest, receiving cash or disbursing cash, goods and services should be settled by lenders and borrowers and they have the ability to do so (Wu, 2002). Under this financial economy different credit products are used, for example credit swaps, short or long-term loans, government securities and bonds, organizational level loans. The financial economy is based on trust, but if this trust is breached then it has serious consequences in the financial market. This expected breach is considered to be risk. When a depositor wants to withdraw deposits before the maturity period then the bank needs more and more funds for the liquidation of the depositor's deposits and if the depositor withdraws heavy amounts then it lead to losses in the bank's liquidity or sometimes even bankruptcy.

Liquidity risk causes different problems in the Islamic banking industry of Pakistan; some of the liquidity risk problems are:

- i. Liquidity risk arises when the depositors are profit driven. If the interest rate of commercial banks improves then such depositors switch their deposits from Islamic banks to commercial banks. This leads to deposit cash flow shortage for the Islamic bank.
- ii. The depositor might possibly withdraw their funds or switch funds from an Islamic bank to a commercial bank if their expectations are not accommodated. Such type of depositor can be called Shariah driven or Shariah-compliant natured.
- iii. The depositors of Islamic banks mainly prefer short-term deposits. Therefore the total amount of funds in *Wadiah* demand deposits, *Mudarabah* saving deposits and one-month *Mudarabah* time deposits are significant and implies the potential of short-term demand for liquidity.

- iv. The Islamic banking system is based on equality finance and discourages debt financing because equity financing leads to profitability and debt financing originates interest.
- v. Islamic banks of Pakistan have liquidity risk management practices but such practices are not ideally implemented. The Islamic banks have to convince depositors to take part in the long-term placements of deposits to finance long-term Islamic projects. At the same time, they have to be able to manage short-term demand for liquidity from depositors.
- vi. Islamic banks' operations are based on investment, in the business/industrial sector of the country to avail profits and share it with depositors. Nonetheless, return-oriented depositors always expect to receive a competitive and continuous profit/return sharing return on their deposits.
- vii. Due to liquidity mismatch Islamic banks might sometimes be unable to fulfill the demand for depositor's deposits/liquidity withdrawals.

1.5 Objectives of the Study

Following are the main objectives of the research.

- i. To analyze the liquidity behavior of depositors of Islamic banks of Pakistan.
- ii. To examine the Islamic banks' liquidity management system (i.e. current practices to manage liquidity) and organizational structure.
- iii. To identify the factors that influence liquidity of Islamic banks.

1.6 Research Questions

The specific research questions that this research study aimed to answer are:

- i. What is the liquidity behavior of depositors in Islamic banks of Pakistan?

- ii. What are the current practices relating to liquidity risk management in banking sector of Pakistan?
- iii. What are the different factors influencing Islamic banks for balancing liquidity in Pakistan?

1.7 Scope of the Study

The methodology of this thesis was based on a positivistic paradigm and quantitative analysis. In this study the primary data for liquidity risk management were obtained through a questionnaire (survey) method. A total of 270 questionnaires were completed by Islamic bank depositors and 265 survey forms were filled by Islamic bank bankers. The secondary data were obtained from the annual reports of the Islamic banks of Pakistan. In addition, interviews were conducted to authenticate the data collected through the questionnaire. The questionnaire and interviews were conducted with the depositors of Islamic banks as well as the bankers of Islamic banks of Pakistan. Primary data were analyzed using Statistical Package for the Social Sciences (SPSS) software and secondary data were analyzed using E-Views research software. The methodology and variables considered in this thesis were:

- 1) The main focus of the empirical research was to analyze the practice of liquidity risk management of Islamic banks and to gain real information about the perceptions of banking depositors and Islamic bankers regarding their liquidity behavior.
- 2) First, secondary data and information from Islamic banks of Pakistan will be used. One complete chapter will be written thereon. The chapter analyzes: (i) the performance of the

industry and the practices of liquidity risk management in Islamic banks; (ii) the techniques to manage liquidity risk used by Islamic banks.

- 3) Second, different research models were constructed: (i) Asset model to understand liquidity behavior of Islamic banks; (ii) Liability model to understand liquidity behavior of depositors; (iii) Liquidity reserves model to capture factors influencing the optimal liquidity reserves position; and (iv) Demand for and Supply of liquidity models to trace the resilience of the industry if irregular liquidity demand and liquidity run occur.
- 4) Primary data (field survey) are required for the verification of secondary data related to econometric outcomes. The field surveys explain the results and strengthen and validate the research aims. Also the survey provides direct insight of the industry. The field survey was conducted with depositors and Islamic bankers. The survey was used to understand the investment and liquidity behavior of depositors and the liquidity management policies and strategies of Islamic banks. The surveys use semi-structured questionnaires to investigate various crucial issues in liquidity risk management.

Not only were the primary and secondary data analyzed with a quantitative (positivistic) method but also the literature on management of liquidity, international banking standards and Shariah guidelines were reviewed. The final output of the thesis was the management and administration of liquidity management program for the Islamic banking industry of Pakistan.

Each of the following five Islamic banks was represented by three bankers:

- i. Meezan Bank Limited

- ii. Burj Islamic Bank Limited
- iii. Dubai Islamic Bank Limited
- iv. Bank Islami Pakistan
- v. Albaraka Islamic Bank Limited.

In relation to depositors, the target respondents of the survey were those who are depositors of any Islamic bank located in the various provinces and cities of Pakistan. In total, 400 individual depositors participated in the survey. In sampling, a simple random sampling technique was applied because the Islamic banks are few in number so the depositors will be selected at random.

1.8 Conceptualization of Variables

Three models are tested in this research study: liability, asset and liquidity reserve model. The models and variables are explained below.

Liability Model

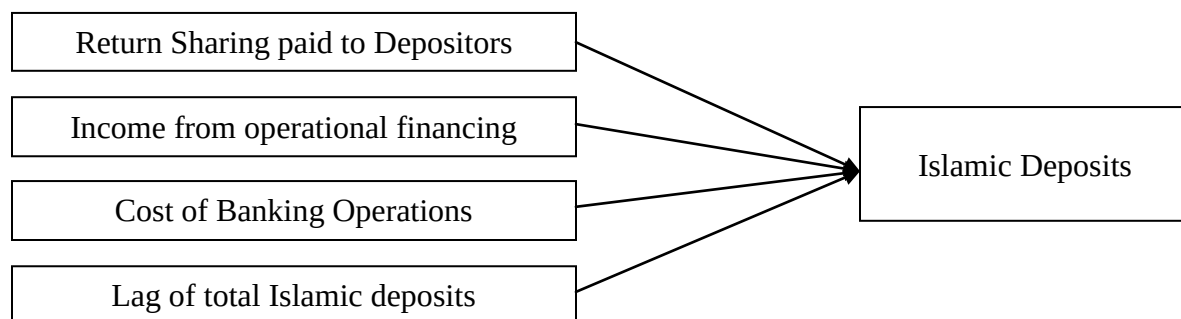


Figure 1.1 Liability Model

The liability model is related with the depositors' behavior as to deposits and deposits withdrawal. There are four different independent variables and one dependent variable. Total Islamic deposits (i.e. *Qard* deposits and *Mudarabah* time deposits) represents the dependent variable, the independent variables are as described as follows:

- i. Return sharing is the tool for the depositors for taking a decision as to whether to invest in the bank or withdraw the amount therefrom. Therefore the first independent variable of this model is the return (profit) paid to the depositors of Islamic banks.
- ii. Depositors who wish to invest will review the bank's performance and analyze the portfolio financing of the Islamic bank. The operational financing incomes of the bank lead to depositors' satisfaction with the bank's performance; therefore, this variable is considered the second independent variable of this model.
- iii. Besides returns and investments another aspect is also considered vital: cost of operations. The depositors' review cost of banking operations to analyze the cost effectiveness of the operations of Islamic banks. Therefore the third independent variable of this model is banking operations cost.
- iv. A new potential depositor has an instinct to determine the previous depositors' liquidity behaviors. This behavior support show satisfied the old depositors were with the Islamic bank. Therefore, the fourth independent variable is adapted as SD lag because it is the self-assessment of existing depositors.

Asset Model

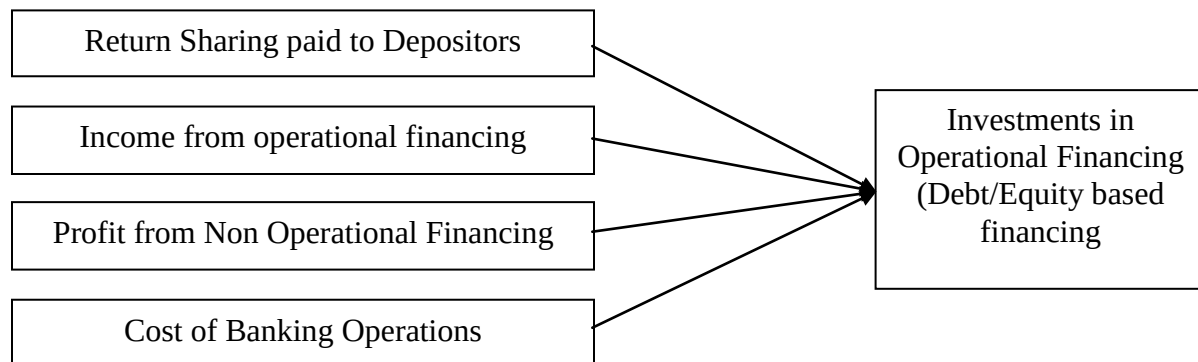


Figure 1.2 Asset Model

Entrepreneurs provide deposits to the Islamic banks therefore to analyze the liquidity behavior of the Islamic banks the asset model is used. Here in asset model there are four independent variables are considered and one dependent variable. The dependent variable is operational finance investment (PDF). Operational financing is based on debt and equity based financing. As explained earlier that four independent variables are tested in the study so following are the four variables details;

- i. The Islamic banks endeavor to attract new customers and wanted to sustain the existing one. This endeavor is based on the financing portfolio decision of the Islamic banks. Therefore the return paid by Islamic banks to the depositor (RPA) is considered first independent variable for this model. “Under a dual banking system, paying a competitive and attractive Islamic return is suggested to make Islamic banks competitive” (Ismael, 2010: pg 12).
- ii. For the measurement of portfolio financing of Islamic banks the operational financing income (DFR) tool is taken as second independent variable for this study.
- iii. As far as the depositor’s investment is concerned, they review the bank performance and also analysis the portfolio financing of the Islamic bank. The non-operational financing profits (NOP) of the bank also leads depositors satisfaction for the bank performance, therefore this variable is considered third independent variable of this model.
- iv. The fourth independent variable of asset model is the banking operations costs. These operational costs not only provide profit analysis but also Islamic bank can analyze the cost effectiveness of their operations.

Liquidity Reserve Model

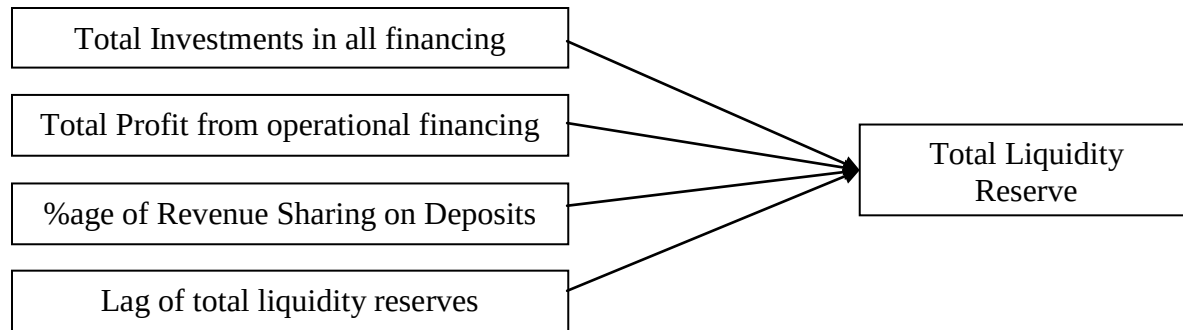


Figure 1.3 Liquidity Reserve Model

The third model of this research study is the liquidity reserve model. Liquidity reserves serve as a moderator between liquidity and liquidity withdrawals. In this model liquidity reserve (R) is the dependent variable and the four independent variables of this model are explained below:

- i. The first independent variable of the liquidity reserve model is investments made by Islamic banks in all financing schemes. The said variable denominates the flexibility of financing that effect the liquidity reserve.
- ii. The second variable is related to return from financing (OP). This variable reflects that the operational financing income of a bank leads to a depositor's satisfaction with the bank's performance. This also reflects the importanceof profit margin to depositors and bank portfolio financing.
- iii. If any potential depositor wants to invest in an Islamic bank then the variable 'return sharing percentage on deposits' helps the investor to decide whether to invest or not. This is the independent variable for this model.
- iv. If the Islamic banks want to analyze their current and future liquidity needs then they have to analyze the lag of liquidity reserve, which is also an independent variable of this model.

1.9 Structure of the Thesis

This research thesis has eight chapters. These chapters relate to introduction, problem statement, objectives, review of literature, methodology of the study, econometric analysis, survey through questionnaire analysis, interview transcriptions of Islamic bankers and Islamic depositors, themes and thematic analysis and ultimately conclusions of the study. An overview of these chapters is given below.

Chapter 1 describes the background to Islamic banking and liquidity and the importance of liquidity to Islamic banks. The rationale of the research is discussed along with the problem statement and significance of the study. This chapter also specifies the potential causes of liquidity risk. The objectives of the study, which were derived from a review of the literature, are stated. For the fulfillment of the research objectives the research questions and research hypotheses are presented. The scope of the study and conceptualization of variables are explained including an overview of the three research models: assets model, liability model and liquidity reserve model. Lastly, the limitations of the study are explicated.

Chapter 2 of the dissertation provides a literature review on liquidity management in the banking sector. This chapter starts with a brief overview of the banking sector. Then liquidity risk in the banking sector is discussed. Subsequently, the liquidity risk management process is described and asset-liability imbalances pertaining to liquidity management and techniques to manage liquidity risk are discussed. As this research relates to Islamic banking segment, Sharia-related issues in the liquidity management of Islamic banks as well as approaches and techniques to manage liquidity risk in Islamic banks are discussed.

Chapter 3 gives an overview of the research process and structure, as well as presumptions made and topics not investigated. The remaining subsections explain the research paradigms and quantitative and qualitative methods. The research method and design for this thesis are then described. Followed by a discussion of the questionnaire design, the respondents, data collection processes advantages and disadvantages, and a pilot study of the research strategy. The secondary data analysis method is then summarized. The limitations of the study are presented.

Chapter 4 of the research thesis provides analysis of three types of data collected for the study: quantitative data from the annual reports of Islamic banks, qualitative data using close-ended questionnaires from both depositors and Islamic bankers in Pakistan and qualitative data from semi-structured interviews with both depositors and Islamic bankers in Pakistan. This triangulation (validation) (validation) method approach gave the researcher detailed insight into the liquidity dynamics of Islamic banks in Pakistan. The quantitative data were collected to test three liquidity models. The first model provides insight into the liquidity behavior of the depositors: liability model. The second model investigates the liquidity behavior of Islamic banks: asset model. The third model tries to establish the determinants of liquidity reserves in Islamic banks: liquidity reserve model. The estimation of this part is conducted using E-Views, and panel estimation technique using random and fixed effect modeling is applied on this data in order assess liquidity dynamics of Islamic banks in Pakistan.

Chapter 5 is related to the analysis that provides the results of a survey conducted to assess the opinion of both Islamic bankers and Islamic bank depositors in the context of market success and liquidity management of Islamic banks. Subsection 5.1.1 provides analysis of the survey

conducted with the depositors of the Islamic banks. A total of 270 respondents responded to the survey. The survey contained questions related to awareness and knowledge of Islamic banks, investment motives and liquidity-related behavior. Subsection 5.1.2 provides analysis of the survey conducted with the bankers working in Islamic banks of Pakistan. A total of 265 Islamic bankers responded to the survey. The survey contained two parts whereby the first part explored the organizational structural aspects of the Islamic banks in relation to liquidity risk management. The second part of the survey investigated the risk management practices adopted by Islamic banks in Pakistan.

Chapter 6 analyzes the qualitative data collected through semi-structured interviews with both Islamic bankers and depositors. The purpose of this analysis is to provide a detailed insight into the liquidity management process and perspectives of both managers and depositors of Islamic banks. This part of analysis is divided into two sections, whereby the first section of the analysis analyzes the responses of the managers of the bank and the second part of analysis explores the opinions of the customers of the Islamic banks.

Chapter 7 of the dissertation provides discussion on the findings of the study along with a synthesis of the research. This part of the thesis also provides implications of the research, whereby focus is levied on compiling the findings of all three analyses: econometric analysis, survey questionnaire results and qualitative analysis. Econometric analysis considered three models (i.e. liability model, assets model and liquidity reserve model), while survey questionnaire collected data from both depositors of Islamic banks and Islamic bankers in Pakistan, qualitative data was also collected from the Islamic bankers and depositors of Islamic

banks. This part of thesis is organized as follows: the first part provides an overview of the findings of the econometric analysis and discussion, the second part provides a description of the findings of questionnaire survey analysis and discussion, after that findings of qualitative data analysis are explained along with implications. Lastly, an overall discussion combining all of the data and respondent types is provided along with the implications concerning liquidity management in the Islamic banks of Pakistan.

Chapter 8 concludes the research by providing an overview of findings, recommendations and directions for future research.

Chapter 2

Literature Review

This part of the dissertation provides a literature review on liquidity management in the banking sector. This chapter starts with a brief overview of the banking sector followed by a description of the liquidity risks faced by banking institutions. The liquidity risk management process is then described. The next subsection summarizes the determinants and consequences of maturity mismatch risks and asset-liabilities imbalances pertaining to liquidity management. Then techniques to manage liquidity risk are discussed as well as liquidity and financial instruments. Sharia-related issues in the liquidity management of Islamic banks are presented and lastly approaches and techniques to manage liquidity risk in Islamic banks are discussed.

2.1 An Introduction of Financial Institutions

Banks and other financial institutions trade money and help circulate money between businesses and general savers in the economy. There are two critical factors a bank has to consider in order to remain competitive in the market: liquidity management and provision of financial services to its clients. Liquidity management refers to attracting money from depositors and then balancing demands for money from lenders and from depositors asking for their money back (Akkizidis and Khandelwal, 2008). Basically, banks get money from depositors and invest this money by providing advances to lenders, but banks have to retain a certain proportion in order to meet the demands of depositors, who might need money. Banks attracting short-term deposits (e.g. current accounts) and investing a large proportion of such money in long-term advances are more likely to fall prey to liquidity risk. Investing less in long-term advances might hinder the profitability of the banks. So, banks have to seek a balance between their investments and demands for funds from depositors. Liquidity of banks also relates to the solvency of the bank. Banks could also

invest funds in more liquid financial instruments, so that money could be arranged more quickly. By and large, banks have to make sure that they pay their depositors when they demand their money (Fiedler, 2000) and remain solvent. In order to manage their liquidity, banks seek balance between their assets and liabilities, further liquidity reserve is also maintained and other liquidity management policies are designed.

The main thing with regard to the management of liquidity is to provide for liquidity from the asset side, when it is being demanded by the liability side. A balance is sought in this regard between assets and liabilities of the banks and more deposits are attracted, a liquidity reserve is maintained and better asset and liability management practices are adopted. Failure to do so might result in liquidity chaos, due to which customers' trust in the bank might be lost and the banks will suffer the consequences in the long run.

2.2 Liquidity Risk in Banking Institutions

Risk prevails in every type of organization and banks have to consider their liquidity as a top priority. The following is a description of the nature of risk in the banking sector and the relative liquidity profile of the banks.

2.2.1 Nature of risks in banks

Every organization faces three general types of risks: operational risks, financial risks and business risks. The same is the case with the banking industry, whereby every bank faces operational risk that is related to the internal operations of the bank. Business risk, on the other hand, is associated with the industry risk, which relates to the external business environment of

the banks. Lastly, financial risk is related to the probability of default of a bank, whereby both creditors and depositors are taken into consideration. The financial risk of banks can be further divided into three categories: market operational risk, credit risk and liquidity risk.

Howells and Bain (1999) stated that the deviation between expected and actual return is called risk. Further, the classification scheme of various types of risks is not exact, as it cannot categorize risks into isolated types. All risks are interrelated and associated in the sense that increment of one type of risk also boosts other type of risk (e.g. in the banking sector, liquidity risk could provoke credit or market risks of banks and vice versa). The same is the case for liquidity risks, operational risks and business risks. In the banking sector, liquidity risk arises out of two situations, of which one is maturity mismatch: where the demand for cash from depositors cannot be matched by a supply of cash from the banks as cash is invested in long-term advances. The second situation arises out of asset–liability imbalance, where more money is arranged from current accounts (short-term liabilities) and invested in long-term assets.

The dynamics of the banking sector have changed and now banks rely more on international financial markets as compared to deposits in order to manage their liquidity. So, liquidity management scenario and practices have evolved over time because of financial innovations and global market developments. Further, the liquidity risk in the overall financial market is also deemed to be correlated, such that the liquidity issues of one bank may affect the overall financial market in any country. So, liquidity management of banks is considered important both at micro and macro contexts.

This liquidity management implication calls for appropriate cooperation and coordination among various stakeholders of the banks, such as the public, bank regulators, policy makers, management and employees. The European liquidity crunch has established the need for a solid liquidity management program, both at regulatory and individual bank's level. Financial innovations, such as derivatives, have added fuel to the fire and a strong need is anticipated in derivative market in order to deal with unsecured derivatives market. Further, subprime lending from banks is another issue which should be addressed in a prudential manner. There is also a need to enhance financial market discipline in this regard (Chapra, 2008). Greenbaum and Thakor (1997) elaborated that the main reason for a bank's failure lies with the inefficient liquidity management of such banks, particularly in times of hostility or crisis.

Thus, banks should consider establishing a sound liquidity management program, which should also be usable in a hostile and uncertain financial environment, so that unfavorable consequences of bad economic conditions can be mitigated. A sound liquidity program could also help banks to balance the asset and liability sides of their balance sheet and improve their risk-taking approach. Finally, it would also prevent losses to the economy caused by banks' defaults and the government would not have to rush in with a bailout package every time a bank fell prey to liquidity issues.

2.2.2 Nature of liquidity risk in the banking sector

The definition of liquidity risk management as provided by Ismail (2010) refers to the situation when a bank either is unable to meet the cash demands of its depositors or is unable to invest into the assets as due without bearing high costs or heavy losses. Hubbard (2002) defined it as a

situation whereby depositors of the banks collectively want to withdraw their money and this demand for money exceeds the supply a bank could arrange in a short span of time. Apart from that, banks also face liquidity threats when the borrowers of the banks are unable to pay back their financial obligations on time. So, liquidity risk could arise out of the liability side of the banks, where depositors want their deposits to be repaid, and out of the assets side, when borrowers are not able to pay their obligations on time. So the liquidity problems arises in two situations, first is when the bank decides to terminate a loan and the borrower is not in a position to pay back the money and second is when depositors want their money back and the bank is not in a position to return it (Thakor, 1995).

Zhu (2001) elaborated that banks accept liquid cash from liability side and invest that money in long-term assets that are not that liquid, so the nature of banking business invites gaps between liability-side cash requirements from customers and asset-side cash generation from the borrowers. There are established practices to manage this gap and if any bank is not able to manage this gap, liquidity risk materializes. This occurrence of liquidity-related issue could also lead the bank towards reputational damage, government bailout and in extreme cases towards insolvency. Such liquidity problems might arise due to inefficiencies related to the arrangement of external or internal funds, condition of the bank at the time of liquidity issue, inability to prepare liquid instruments and the strength of liquidity risk or pressure. Table 2.2.2.1 highlights some of the external and internal factors that cause a bank to face liquidity-related issues and problems.

Table 2.2.2.1 External and internal factors related to banks' liquidity risk

Internal factors	External factors
High exposure, particularly for off-balance sheet items	Nature of financial markets and depositors; if markets and depositors are more sensitive they would respond more to uncertainties and related issues
Heavy reliance on current deposits, particularly short-term deposits of corporate sector	Economic shocks and uncertainties
Mismatch between asset and liability side maturities	Sluggish economic scenario
Rapid expansion of the bank	Lack of depositors' trust
Short-term-oriented depositors	Socio-cultural or geo-political factors such as political uncertainties and civil unrest
Inefficient investment allocation or lower allocations in more liquid assets e.g. in T-bills etc.	Unanticipated and large withdrawals from depositors
Wrong fund placements or suboptimal portfolio construction	Governmental actions such as termination of government securities and deposits

Source: Antonio (1999), Mirakhor and Iqbal (2007), Alsayed (2007), Ismal (2008).

Conventionally, ratio analysis is considered one of the most simple and usable ways to determine the liquidity position of banks. There are four types of financial ratios: liquidity ratio, ratio of demand deposit to private sector credit, NPLs ratio and loan to deposit ratio. The first form of the ratio is related to the liquidity prospects of the bank, whereby current assets and current liabilities of the banks are compared and evaluated. Then there are economic implications as well; Moreno (2006) stated that current ratios of certain economies might be higher in countries in which:

- i. Governmental support is not available to banks for liquidity management
- ii. Financial players are risk averse in nature
- iii. Deposits are fixed interest based
- iv. Hedging, risk diversification or risk transfer mechanisms are not in place.

A survey conducted in 2006 by Bank for International Settlements (BIS) claimed that countries like Hungary, Saudi Arabia, Mexico, Hong Kong, Poland, Turkey, Czech Republic and Korea have higher liquidity ratios due to the above-mentioned reasons.

The second ratio in the context of liquidity evaluation is the ratio of demand deposit to private sector credit. Advances to private sector are not that liquid and are considered long-term commitments, while the tendency of a bank to rely more on demand deposits could cause a mismatch between asset and liability sides of the bank. The third ratio in this regard relates to the NPLs of the bank and is termed NPL ratio. The higher the NPL ratio the higher the mismatch would be between asset and liability side and more would be the losses for the banks. Lastly, loan to deposit ratio measures the percentage of the deposits that are advanced to the borrower. The higher this ratio, the higher would be the need of liquidity for the banks. Higher liquidity reserves could meet this need. Failing to meet liquidity reserve requirements could raise liquidity-related problems for the bank.

2.3 Liquidity Risk Management Process

BIS stresses that banks should identify, measure, monitor and control their liquidity risk and all liquidity management measures should be taken in the context of the economic scenario in which they operate (BIS, 2008a). Liquidity risk management process of the banks relies on four elements. The first element in this process is composed of initiatives and policies of the board of directors (BOD) of banks for liquidity management; the second element rests with the role and initiatives of Asset Liability Committee (ALCO). The third element considers usability of information management system, which helps to monitor and report liquidity risk; the fourth

element is based on the role of the internal control system, which ensures an effective liquidity management process. Following is a brief discussion on each of these four elements in detail.

2.3.1 Liquidity management policies

The BOD of a bank provides the basic or umbrella framework for liquidity management in a bank. The BOD is responsible for devising effective liquidity management policies and these policies serve as a guiding framework in the whole of the banking organization. According to BIS (BIS, 2008b), the BOD should at-least consider three aspects of liquidity management in a bank. First, is to understand the bank's liquidity risk profile in relation to both external and internal environment of the banking industry in order to decide upon the risk tolerance level of the bank. Second, the BOD should devise and support implementation of practices, policies and strategies for liquidity risk management in the bank. The third consideration in this regard is communication, dissemination and guidance of senior managers of the bank so that they might be able to manage liquidity risk in an appropriate manner. Lastly, the fourth consideration of the BOD should be to include risks, benefits and costs of liquidity management in new product approvals, performance measurement and pricing of the products and services.

There is a great deal of variation in liquidity management policies of different banks, but according to Greenbaum and Thakor (1995), four elements should be considered with regard to designing and implementation of liquidity management policies. The first element in this regard is that the policy devised should have clear objectives and goals on the management of liquidity of the banks and both short-term as well as long-term liquidity management strategies should be incorporated in the policies. Second, these policies should clarify responsibilities and roles of

authorities and bodies' ensuring liquidity management process. The specific aspects that should be highlighted in this regard are policies related to asset and liability side and management and relationship of bank with regulators and other banking or financial institutions. Third, these policies should also draft mechanism of identification, monitoring, reviewing and reporting of the issues related to the liquidity aspects of the bank. Lastly, these policies should establish the risk tolerance level of liquidity risk of the bank and there should also be a contingency plan for handling of liquidity-related pressure.

While drafting liquidity management policies, the BOD should take input from the individuals and bodies actually managing the liquidity risk of the banks. These individuals and bodies include risk management department of bank and chief executive officer (CEO) of the bank. Suggestions and policies of various stakeholders, particularly regulatory authorities, should be incorporated into the policy framework of the banks as devised by BOD. Such integration and two-way communication between BOD and other stakeholders ensure that the devised liquidity management policies are consistent with the realities of internal characteristics and external environment of the bank and such policies are then better implemented.

2.3.2 Asset Liability Committee (ALCO)

ALCO represents the implementation authority of the liquidity management policies as devised by BOD. The BOD devises the liquidity management-related policies and ALCO implements these policies to the lower levels of banks (see Figure 2.3.2.1). ALCO basically devises strategies for implementation of the liquidity management policies and these policies are implemented in collaboration with various risk management committees of the bank, including financial risk

management committee, business risk management committee and operational risk management committee. Following are the functions performed by ALCO:

1. ALCO is responsible for management and monitoring of day-to-day liquidity management position of the banks. In order to perform this function, it oversees asset and liability side along with collaterals retained by the bank.
2. ALCO also locate imbalances between liability and asset side or in asset allocation. These imbalances might pose serious threats to the liquidity position of the banks.
3. ALCO also takes practical measures to mitigate imbalances between liability and asset side of the banks.
4. ALCO is also responsible for building a good relationship with stakeholders of the bank, which allows ALCO to anticipate and manage liquidity-related issues and pressures.

ALCO carries out all of liquidity management-related functions and keep in touch with BOD and other related bodies, such as financial risk management committee, operational risk management committee and business risk management committee.

Senior managers carry out ALCO strategies at all operational levels. Managers of each hierarchal level are responsible for implementation of liquidity management policies to their subordinate levels. These managers have the following liquidity management-related responsibilities:

1. Transformation of strategies, objectives and policies relating to liquidity management into action plans to be implemented at operational levels and perform their usual duties and responsibilities.

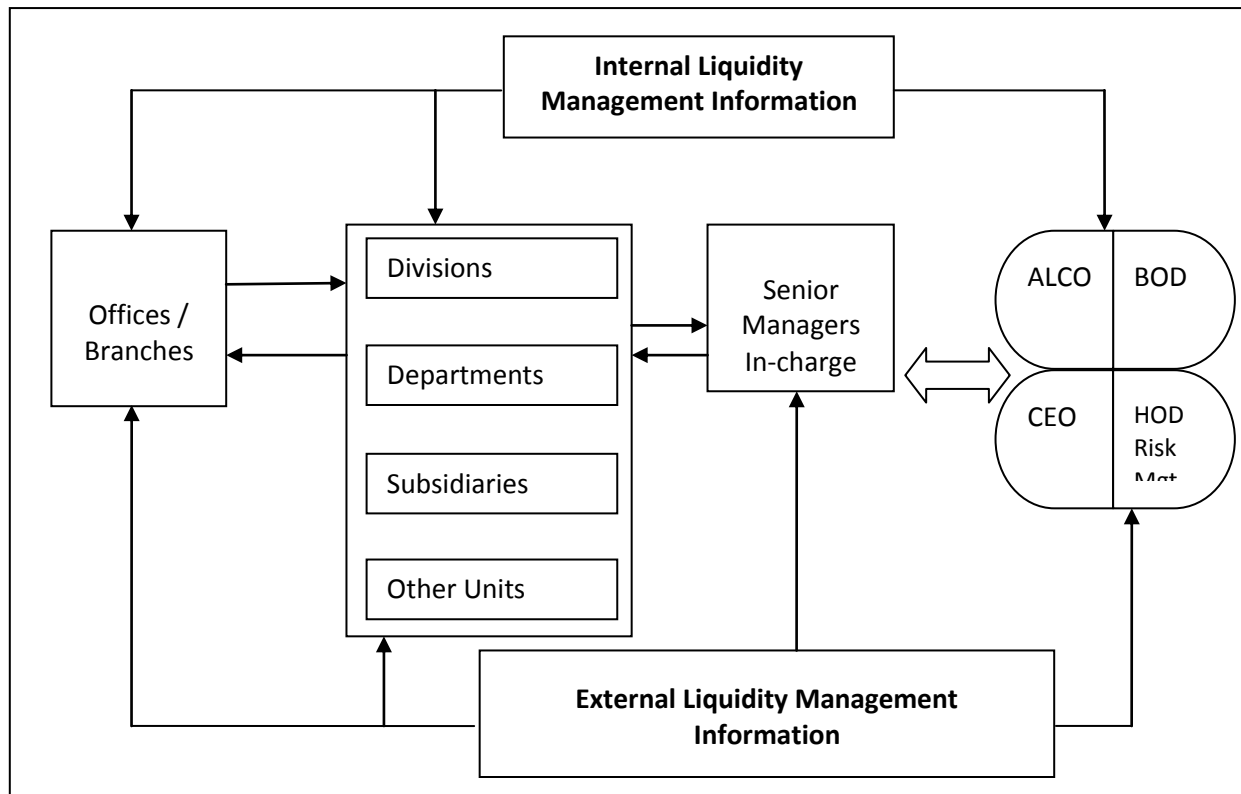
2. Ensure operational soundness of liquidity management plans and their relative implementation.
3. Monitoring implementation of liquidity management policies and processes and providing feedback to the top management and BOD for better policy.

2.3.3 Effective information management system

According to BIS (BIS, 2008a), effectiveness of information management system is a key consideration in the liquidity management process of banks in the modern era. Such systems support bankers to collect data, monitor, assess, report and control liquidity risk of their banks and their related exposure, thus, with the help of effective information management systems banks are better able to anticipate their funds requirements and relative cash inflows and outflows.

Liquidity information management system has two-way implications for both decision makers who devise liquidity management policies and decision followers at the level of operations. Decision makers, in the bank, are represented by BOD, CEOs, ALCO and managers of various risk management departments. Decision followers on the other hand, are represented by senior managers and their subordinates. Liquidity-related information from the liquidity information management system flows between internal members of the organization from BOD to the lower level of managers and vice versa. A simple liquidity information system is depicted in Figure 2.3.3.1.

Figure 2.3.3.1 Liquidity information system in a typical bank



Adapted from (Ismael, 2010)

The information flow is two-way; where senior managers receive liquidity management policies from the BOD through the system and then directs their subordinates to implement the policies and report related issues. Thus, all the information related to the liquidity management in the banks is transmitted to the managers, and then issues and problems on liquidity management process are highlighted and communicated to the BOD and new directions are then designed and implemented. Thus, a liquidity information system facilitates banks to communicate policy and relative results of implementation of this policy. Further, the information system also provides information relating to internal and external environment of the bank, the relative need of liquidity and better aligns the liquidity management policies with the practical context of the individual bank.

Further, some banks also disseminate information on their liquidity management to their external stakeholders. This enables the customers and depositors of the bank to assess the liquidity credentials of the bank and make an informed decision considering the liquidity management scenario (BIS, 2008b). Thus, provision of an effective liquidity information management system enables the organization to communicate, coordinate and assess liquidity-related aspects of the bank, which makes liquidity management a dynamic and efficient process. A liquidity information management system provides a comprehensive mechanism to provide both standardized and customized information for individual banks.

2.3.4 Liquidity management internal control system

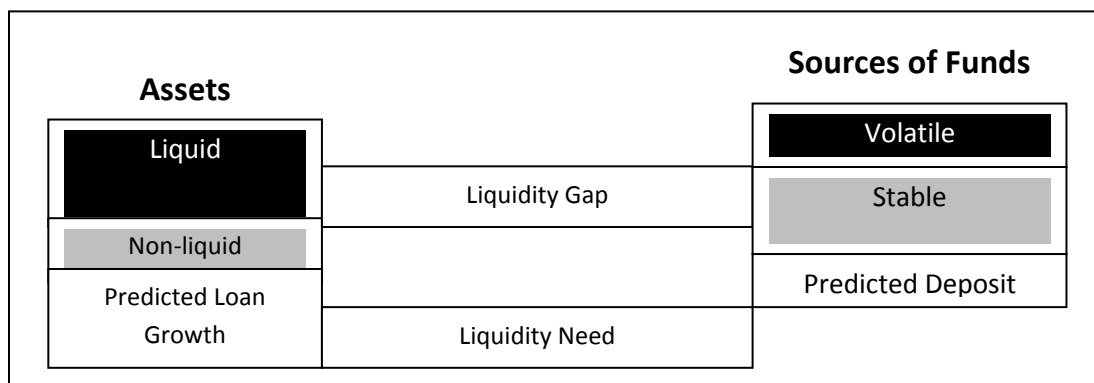
Lastly, an internal control system is considered very important in the quest for liquidity management. According to BIS, every bank needs an effective internal control system, so that the policies and procedures are duly implemented and monitored. ALCO could be assigned this internal control system, where ALCO might ensure the implementation of liquidity management practices on behalf of the BOD. ALCO with the help of an internal control system investigates and identifies liquidity-related issues and tries to mitigate them. For severe problems, ALCO consults with senior managers and BOD and seeks policy guidelines.

Apart from that the primary functions of internal control committee are to conduct audits of the liquidity management implementation and process, evaluate liquidity-related issues, and propose solutions to existing liquidity-related problems. Further, the existence of an internal control system also ensures that all requirements of government regulators are met and reliable information can be disseminated to the internal stakeholders with ease (BIS, 2008b).

2.4 Maturity Mismatches and Asset-Liability Imbalances

There are two main reasons for liquidity risk. First is maturity mismatches and second is asset-liability imbalance. According to Helmen *et al.* (1994), such situations arise in two ways, banks either have too many liquid resources in relation to the volatile liabilities or the estimated funds required at asset side are higher compared to the estimated funds available at liability side. The former situation is known as liquidity gap and the latter is called liquidity need. Both of these situations are depicted in Figure 2.4.1. Identification and control of these two aspects of a bank's liquidity could substantially reduce its liquidity risk. This could eliminate funding liquidity risk, whereby a bank has to arrange for the funds required by a short-term depositor in case there is a withdrawal and market liquidity risk, whereby due to some anomaly or problem in the financial market, a liquid asset becomes less liquid (Sharma, 2004).

Figure 2.4.1A representation of liquidity need and liquidity gap



Helmen *et al.* (1994)

Matching the maturities of asset-side advances and liability-side obligations is one of the common ways to manage liquidity risk. Greenbaum & Thakor (1995) termed it as maturity mismatch risk anticipation. In order to use this matching of maturities approach, bank deposits are organized according to their maturity and demand for liquid funds from matured deposits is

then matched with the supply of funds from matured assets. Using this approach effectively can eliminate liquidity gap and liquidity need.

2.4.1 Determinants of maturity mismatch risks and asset-liability imbalance

As discussed previously, maturity mismatch and asset-liability imbalances could prove to be fatal in context of liquidity management scenario of the banks. The first determinant of this mismatch or imbalance is the tendency of depositors to opt for short-term deposits or current accounts. According to Sharma (2004), in a situation where banks have more current short-term deposits, banks have to invest some of these funds into long-term investment projects. In such situations, asset-liability imbalance or maturity mismatch could occur because short-term deposits are more liquid in comparison to long-term investments. So, customers could ask for money from short-term deposits and if that money is stuck in long-term investments, the bank could face liquidity issues. In such a scenario, the bank would be forced to liquidate long-term investments and incur unwanted costs. Thus, relying heavily on short-term current deposits enhances the probability of financial distress for the banks (Beakley & Cowan, 2005).

The second determinant of this liquidity issue is high rate on deposits, which lure more depositors in and subsequent higher rates on advances to the corporate sector. This strategy seems good, but in cases of economic problems, businesses decline and entrepreneurs become unable to pay back the loans and interest thereon. This impacts cash flows of the banks and banks also become unable to pay back their depositors. In such situations, banks have to revert back to the money market to arrange funds, otherwise serious liquidity problems could arise and the bank could face disaster.

The third influencing factor with regard to asset-liability imbalance and maturity mismatch is heavy reliance on the corporate sector, particularly when the corporate sector keeps funds with banks in short-term deposits. Big corporate players have larger cash requirements and they might ask for their money without prior intimation and a large amount of money might be withdrawn from the bank. The behavior of corporate clients is said to be unpredictable and uncertain in this regard and if they need a large amount of cash, banks could face severe liquidity-related issues.

Greenbaum and Thakor (1995) provided the fourth influencing factor by explaining that an information asymmetry exists between different stakeholders of banks (i.e. regulators, borrowers, banks and depositors). So, in a dynamic environment every stakeholder has different fund-related requirements and it is very difficult to anticipate the fund requirements of each stakeholder. A bank invests money and a depositor could need that money, so this unorganized liquidity behavior of banks and their depositors do not exhibit set patterns and, thus, it usually is difficult to balance asset and liability sides and have optimal fund allocation.

The last determinant of asset-liability imbalance is related to the business or economic cycles (Zhu, 2001). Economic depression might impact the quality of loan portfolio of the banks and banks would face difficulties in recovering loans and interest from borrowers. This economic depression, as a consequence, affects the asset-liability balance of banks and the liquidity position of the bank suffers.

2.4.2 Consequences of maturity mismatch and asset-liability mismatch

Liquidity risks due to maturity mismatch and asset-liability mismatch do not occur in isolation, this risk also contributes towards other risks to a bank. There are three major types of risks,

which could be provoked by maturity mismatch and asset-liability mismatch and these risks are insolvency risk, reputational risk and government takeover risk. The following discussion highlights these risks in relation to the maturity mismatch and asset-liability imbalances.

2.4.2.1 Insolvency risk

Insolvency risk arises when a bank is unable to meet its financial obligations. If a bank is under liquidity constraints and cannot pay money to its depositors, such liquidity problems provoke an insolvency risk for the bank. Liquidity problems occur when a bank fails to maintain enough liquidity reserves, is unable to borrow from money market or cannot sell its marketable securities and other liquid assets. Thus, if a bank is unable to generate cash when required by the investors, it faces liquidity risk, which is converted into risk of insolvency. According to Greenbaum & Thakor (1995), insolvency risk arises when liabilities of a bank are higher as compared to the assets of the bank. In such a scenario, net worth of the bank becomes negative.

2.4.2.2 Reputational risk

If a bank fails to provide cash on the demand of its depositors and is unable to generate cash from the money market or from any other source, liquidity pressure on the bank mounts and the bank loses its reputation in the eyes of its stakeholders, particularly its depositors. In the modern economy, when financial institutions like banks are considered a key economic force, loss of trust in banks could also damage the economy of a country. Depositors lose their trust in the overall financial system and the flow of capital within the economy is restrained.

2.4.2.3 Government takeover risk

As described, liquidity issues in the banking sector can damage the whole financial structure of a country and ultimately the economy of that country suffers. In order to avoid these negative economic consequences, governments provide certain bailout packages to banks facing liquidity

distress. There have been various instances when the government bailed the banks out from liquidity distress, such as in the Asian economic crisis of 1997 and global financial meltdown of 2008–2009. Government in such a situation acts as lender of last resort and sometimes takes over distressed banks in order to mitigate the negative consequences of a bank's default on economic perspectives.

2.5 Mitigation of Liquidity Risk

Previous discussion established that mitigation of liquidity risk for banks is a very important task and it is common to analyze the liquidity position of a bank by comparing its assets and liabilities: gap analysis. This tool compares the asset side of the bank with its liability side for a period of time (Heffernan, 2001). It normally is argued that a bank has to yield higher returns from investments in assets and keep the costs as low as possible at liability side. Summary ratio for this gap analysis is the ratio of total returns from liability side to total cost of interest on deposit side. If the ratio yields a negative figure, then the bank should:

1. Enhance the capital/equity requirements.
2. Increase interest rates on credits in order to avoid maturity mismatch risk and asset-liability imbalance risk.

If the bank opts for increasing the interest rate, it would negatively affect the portfolio of the bank and the NPLs of the bank would increase as a consequence. BIS in this regard suggested that such banks should consider diversifying their funding sources and arrange for contingent liability resources (BIS, 2008b).

Liquidity is considered an important concern in the daily operations of banks, whereby banks need cash to match depositors' demands for money. This demand could be regular or irregular in nature, whereby regular demand arises out of the regular business activities of customers (BIS, 2008a) and irregular demand could either be predictable or non-predictable. Predictable irregular demand arises out of non-routine business activities of customers like liquidation of premature time deposit, termination of time deposits after maturity and government withdrawals for fiscal operations. Non-predictable irregular demand is sudden and represents extreme events like natural disasters, political and social unrest, economic uncertainties, financial crises or contagious banking crises.

Banks maintain certain standby arrangements on asset side, so that the regular liquidity demand can be catered for. This standby arrangement is represented by a pool of funds, which can be readily available to provide liquidity, even on a daily basis. The amount in the pool is determined by a bank's characteristics; larger banks would have to maintain a larger liquidity pool than smaller banks and vice versa (BIS, 2008a). Helmen et al. (1994) stated that this pool of funds is composed of:

1. Foreign exchange: Banks maintain certain levels of foreign exchange currencies in order to meet the demand from foreign account depositors; any surplus on foreign currency is immediately transferred to central bank.
2. Investment is made in short-term certificates like central bank certificate and treasury bills.

3. Short-term deposits are also maintained with other banks in order to make funds available immediately. These deposits could be called on at very short notice. Further, this option is less liquid as compared to state bank's security deposits.
4. Cash under collection represents the amount which is under process like checks drawn on other banks and checks deposited with central and commercial banks and these checks have still yielded no cash or are launched in clearing.

According to Greenbaum and Thakor (1995), there are three ways to tackle regular demand for liquidity. The first way is to channel more investment into the liquid investment alternatives or keep hard cash in hand. The second way is to target various types of depositors in order to diversify funding sources. Lastly, a bank can always seek the support of central bank as lender of last resort and emergency liquidity could be arranged from central bank.

Furthermore, predictable irregular liquidity demand could be assessed relying on the past experiences of the banks, banks can draw a pattern of liquidity needs and a workable plan on liquidity management could be devised. According to Helmen et al. (1994), predictable irregular liquidity demands may exhibit trends, cyclical or seasonal characteristics. So, banks can easily manage predictable irregular liquidity demand, unless there is some error in estimation or fluctuation in the trend. In this regard, banks could maintain a close relationship with their depositors and request them to share the details of their withdrawals and liquidity needs. This allows the banks to be more flexible and make informed decisions.

The most difficult aspect of liquidity demand assessment is related to unpredictable irregular liquidity demand. This demand arises out of unfavorable economic or business conditions and

such conditions are unpredictable to a large extent. Banks, however, can take a proactive approach to deal with this type of demand, such as devising an emergency funding plan termed a contingency funding plan (CFP). Banks could also try to match cash inflows and outflows and retain liquid assets in a larger proportion. Alternatively, banks could also use prudential allocation of assets (PAA); banks could also adopt an integrated banking structure allowing for a department for liquidity risk management. Lastly, a bank could insure its deposits against such kinds of risks. All of these approaches are elaborated below.

2.5.1 Devising a contingency funding plan (CFP)

CFP is a proactive approach that tries to anticipate the liquidity-related problems a bank might face due to uncertainties in the external environment. The plan provides procedures, strategies and policies that are to be adopted in case a bank faces liquidity problems (BIS, 2006; BIS, 2008a). CFP is devised in such a way that it ensures prudential and efficient management of unpredictable irregular liquidity requirements, considering both long-term and short-term scenarios. CFP in the first step anticipates uncertainties and related circumstances that might create severe liquidity problems and after that relative liquidity needs and requirements are assessed. Efficiency and accuracy of CFP depends upon the structure of bank, risk exposure, business complexity, nature and size of the bank.

According to BIS (2008b), CFP anticipates liquidity requirements in three ways. First, quantitative projections are made for off and on balance sheet funds and relative liquidity requirements. During this phase of estimation CFP identifies and ranks all funding sources in accordance with their liquidity presences. Second, usage of funds and potential sources of cash

flows are matched, where strategies related to asset-liability balance are anticipated particularly with reference to liquidity evaporation. Actions, such as using discount windows, policy relating to early deposit cash withdrawals, pricing policies for funding, liquidation of long-term assets and selling off money market securities, are considered during this phase. Lastly, indicators are decided and set up in order to alert the management on the arrival of liquidity crises. Thus, the management of the bank can be warned in advance and adopt a stepwise approach to manage the liquidity crisis.

2.5.2 Matching cash flows and maintaining liquid assets

Under this approach, banks match cash outflows with cash inflows by utilizing a contractual cash inflow agreement or by selling assets. Further, secured borrowings and other repurchase agreements could also be utilized for cash generation in the short term (BIS, 2006). More liquid assets are maintained and are liquidated earlier for liquidity requirements and less liquid assets are utilized later if the liquidity demand persists. The dynamics of financial markets have changed over time and economic activities have become more frequent in this scenario. Thus, an accurate estimation and analysis of future cash flow requirements is quite difficult. So, banks have to include customer behavioral projections along with rollover expectations of deposits. Banks could further make a sophisticated analysis using demographical information on the respondents and utilizing cluster analysis to anticipate their liquidity behavior.

2.5.3 Prudential Allocation of Assets (PAA)

PAA reduces redemption and refinancing risks of banks. It also reduces the tendency of a bank to repurchase its borrowings before their contractual maturities. There are certain considerations that should be kept in mind prior to implementation of this technique. These are as follows:

1. Banks should place an appropriate proportion of their investments in short-term and secured investments. These investments are much liquid and could easily be liquidated prior to maturity dates without any substantial costs.
2. Banks should require collateral from their borrowers (BIS, 2008). This makes the borrowing secure and if a borrower refuses to pay back, the collateral could be sold and liquidated to manage cash.
3. Banks should not finance large projects individually and instead syndicated loans should be preferred so that risk might be shared among the banks involved and any individual banks is not at stake, if any downturn happens.
4. Banks should try to avoid credit concentration in the same industry or the same types of borrowers and a diversification strategy should be utilized in this regard.

2.5.3 Structure of bank

Contemporary bank structure is based on the presence of one bank holding company and its subsidiary banking companies. Thus, liquidity management of the banks works twofold. One is liquidity of the main parent banking company and the other is liquidity of the subsidiary banking organizations. This invites complexity in the phenomenon and banks should follow one of the following ways to manage their liquidity. They either adopt a centralized liquidity management system or a decentralized liquidity management system (BIS, 2006). The choice of one system over the other depends upon various factors such as requirement of collaterals, movability of funds, knowledge management credentials, credit diversification, cost of credit, operational efficiency of banks and business model of banks.

Banks have to ensure liquidity of the parent company and child companies. Both types of companies have different liquidity requirements and behavior. Further, banks have to ensure conformance to the regulatory requirements as liquidity aspects are regulated by central banks (Bank of America, 2004). Generally, in the banking sector, practices of liquidity management flow from parent company to subsidiaries. Holding companies also help subsidiary companies in a scenario of liquidity needs and turmoil. In a case of urgent liquidity requirement, when subsidiaries are unable to raise money through market-based funding, deposits and asset securitization, the parent company bails out the subsidiaries. Generally, a holding company stresses that its subsidiaries should manage their liquidity-related issues on their own, but if the liquidity problems persist beyond an acceptable level, the holding company comes forward and issue funds to the subsidiaries (BIS, 2006).

Thus, establishment of an appropriate organizational structure is necessary for banks to manage their liquidity risk. The risk needs to be coordinated, transferred, diversified and mitigated. A proper coordination between holding company and subsidiaries is necessary in this regard. The parent or holding company devises policy as to how much capital would be required for its subsidiaries and how much liquidity reserve should be retained by each subsidiary. The holding company monitors the liquidity position of each subsidiary and releases funds in cases of emergency liquidity requirement.

In this way, a holding company is also able to control its subsidiaries in an effective manner. The subsidiary companies remain dependent on the holding company for their liquidity management and additional liquidity could be managed without any negotiation or delay. Subsidiaries in this

way are not required to go to the open market for their liquidity requirements, and their needs are satisfied by their parent company.

2.5.4 Deposit insurance

According to Zhu (2001), deposit insurance is another effective way to manage the liquidity risk of any bank. This way might be hazardous on moral grounds as it increases costs for depositors, but deposit insurance guarantees repayment of deposits, even if the bank defaults. The deposit insurance company agrees to share the liquidity risk of the bank and pays the depositor if a bank defaults. The downside of deposit insurance is that the availability of the deposit insurance makes a bank more reckless; a bank might adopt a risky investment strategy in order to earn more profit but there are more chances of loss as well. Thus, this moral hazard is associated with deposit insurance, which could damage the whole market mechanism if used inappropriately. Market discipline is of utmost importance at this point and along with that a need for prudent supervision of banks is also deemed necessary in such situations so that the reckless investment behavior of banks can be controlled and market mechanism improved (Batunanggar, 2002).

2.6 Liquidity and Financial Instruments

The liquidity management process is not performed in isolation. Liquidity constraints are studied, certain liquidity management techniques and tools are applied and after that cushions are established to maintain appropriate levels of liquidity. These cushions are provided by the financing strategies of the bank, where some funds are invested in the short term, or liquid financial instruments. Investment diversification and different tenures of investments help a bank

to remain flexible and more diversified. According to Helmen et al. (1994), the decision to invest funds in various financial instruments of differing maturities lies with the following factors:

1. General liquidity management policies of the bank.
2. Needs of liquidity, funds are invested considering this need.
3. Nature, liquidity and access to capital markets.
4. Nature and cost of financial instrument.
5. Projections of interest rates for future periods.

Banks while liquidating their financial instruments consider the nature of required liquidity and type or characteristics of the financial instruments being terminated or liquidated. For example, cyclical liquidity requirements could be tackled by well-estimated liquid assets, seasonal liquidity requirements could be met with time-sensitive securities and long-term liquidity needs could be fulfilled using a combination of short-term debt securities of money market and long-term liquid assets (Helmen et al., 1994).

Financial securities are considered an important means to solve both predictable and unpredictable irregular demand for liquidity. In order to deal with predictable irregular liquidity demand, banks have certain options such as borrowing on short term, issuing long-term securities for short-term liquidity requirements and purchasing short-term securities for short-term funding needs. Such short-term securities include treasury bills, banker's acceptance (BA), certificate of deposit and negotiable certificate of deposits. Thus, short-term financial instruments provide various options and ease to banks, and the liquidity concerns of banks could easily be managed using short-term securities.

Apart from the money market instruments, banks also have the option of local and foreign bonds issued by local and foreign central banks or governments. Such options are relatively risk free and quite liquid and thus could be used for liquidity constraints. Lastly, banks can easily issue short-term securities in the money market, borrow funds from the central banks and engage in bilateral borrowings with other banks. Further, unpredictable irregular demand for liquidity could be dealt with through four means: government bailouts, emergency funds from central banks, liquidity injection from parent company and lending from the shareholders.

There are certain alternative securities that can be used for liquidity management, such as negotiable cash deposits, which are short-term marketable securities; banks can easily arrange for liquidity by liquidating this security in the money market. Then there are certificates of deposits, which can be repurchased by the bank on a fixed charge. Banks can arrange cash by selling BA in the secondary market. BA represents guarantee of the bank to pay a certain amount on a future date to the holder of the instrument. Treasury bills represent one of the most liquid and secure money market financial instruments that could be immediately sold by banks to generate cash flow. T-bills originally are issued by either a central bank or government of a country and are considered risk free. T-bills are issued at a discount and can easily be redeemed at appropriate discounted value before maturity. Central banks also float other monetary instruments such as central bank certificates, which can easily be sold in the secondary market and could be used for fulfillment of liquidity requirements of banks. Lastly, a bank can opt for liquidation of the deposits maintained with other banks. In a contemporary context, certain complex financial instruments like collateralized debt obligation, mortgage-backed securities and credit default swaps have been developed. Such financial instruments are not considered that

liquid because of their unpredictable cash flows, non-trade able nature and complicated assessment (BIS, 2008b). In this scenario, government bonds and central bank certificates are considered risk free, safe and highly liquid and could also be traded both in local and international markets. Banks can easily sell these securities in the financial markets to fulfill a short-term demand for liquidity.

Banks can also directly borrow short-term funds by issuing financial instruments in the money market and under this strategy ownership of at hand securities is not liquidated. Banks could also borrow from central banks and from network banks as well. Most of the banks in the developed countries tend to borrow (Ahmed, 2001). Banks can obtain liquidity by using the option of lending from other banks in the money market but utilizing this option often brings a negative name to the bank in the market. Banks could mitigate this negative impact if they have good banking relationships with other banks in the money market.

If the bank fails to apply the abovementioned ways to manage liquidity, it could seek help from external resources. Among these external resources, the first option is to ask for money from shareholders for a short span of time. The problem with this option is that management of the bank has to justify the need for short-term borrowing from shareholders. The second option is for a bank to borrow funds from its parent company and this is quite usual for banking organizations. In this scenario the bank also has to justify its borrowing for short-term needs. Another option is emergency funds maintained by central bank. Central bank functions as lender of last resort, but requirements of this facility are very strict. This is considered an emergency liquidity facility and has very short loan maturity tenure. A bank has to pay it back within a short

span of time. The strict requirements include capital requirement necessities, collateral requirements, bank performance requirements and strict deferred payment requirements. Lastly, government bailout is the final option and such bailouts were evident in the recent global financial crisis. The US government provided a bailout package to many financial institutions to prevent these companies from collapse and thus both depositors and the economy of USA were saved. By and large this is considered one of the most extreme means of survival and it has many negative consequences, of which loss of reputation is the main negative consequence.

Overall, a bank might encounter liquidity risk due to maturity mismatch and asset-liability imbalance, banks should adopt a systemic approach to solve liquidity issues, whereby the liquidity process should start with the establishment of liquidity management policies along with ALCO. After that there is also a need to establish an internal control mechanism along with an effective information management system. Lastly, other tools and techniques are decided upon to manage liquidity risk. In modern banks, the BOD devises liquidity management policies in coordination with head of risk management department and with members of ALCO. The BOD is entrusted with the top-most authority in this regard. After that senior management channels these policies to functional and operational levels. During this phase, strong internal control and an effective information system support liquidity management process implementation. Lastly, important determinants of liquidity risk are identified and the bank allocates its financial resources in an optimal manner to respond to both regular and irregular demand for liquidity, where irregular demand may be predictable or non-predictable.

2.7 Liquidity Risk Management: Sharia Perspective

The Islamic banking concept is not new and for the past three decades the industry of Islamic banks has prospered. Islamic banks not only operate in Islamic countries like Pakistan, Malaysia and Indonesia, but also have a presence in European countries like the UK. According to Eedle (2009), assets of Islamic banks at the end of the last decade were estimated to be more than \$ 1 trillion. Further, the anticipated growth of the industry was around 10% to 20% and there were more than 250 Islamic financial institutions around the world. Thus, the growth of the industry coupled with the global financial meltdown in 2008–09, compelled Islamic banks to devise a strong liquidity management system and related programs.

Islamic banks are unique financial institutions and have different ways and approaches to tackle liquidity management risks because they are governed by Sharia laws. Lately, due to uncertainties relating to global financial turmoil, Islamic banks have also adopted stringent liquidity management systems and procedures. The Islamic Financial Services Board (IFSB) has provided certain liquidity management guidelines for Islamic banks only: ‘The Guiding Principles of Risk Management for Institutions Offering Only Islamic Financial Services’ and ‘The Technical Note on Issues in Strengthening Liquidity Management of Institutions Offering Islamic Financial Services: the Development of Islamic Money Markets’. These guidelines provide necessary information and guidelines for liquidity management in the Islamic banking segment. This situation by default reduces uncertainty (Ismael, 2008a).

The main principle underlying the Islamic financial system is based on the idea of PLS, whereby interest is not charged on the amount advanced, rather a certain percentage of profit would be

asked from the borrower from the venture in which the money was invested. This feature of Islamic banks automatically mitigates liquidity risk. But if liquidity problems persist, an Islamic bank has to ask for money from a state bank or redeem its marketable financial securities. Thus, almost the same processes and procedure are used in the Islamic banks as adopted by conventional banks (Ismal, 2006).

2.8 Islamic Banking and Liquidity Risk Issues

The dynamics of the external environment have changed and there have been increased concerns over the liquidity-related aspects of the banking sector, particularly after the recent global financial turmoil and Islamic banks are no exception in this regard. Just like conventional financial institutions, Islamic banks have to manage their liquidity concerns effectively in order to avoid insolvency. The long-term survival of Islamic banks is dependent on effective measurement, assessment and management of liquidity issues. The credentials of liquidity management program and policy might differ from conventional banks because they are guided by Sharia law; the program should also cater to the individual needs and characteristics of a specific bank. In Islamic banks the most important consideration is compliance with Sharia laws.

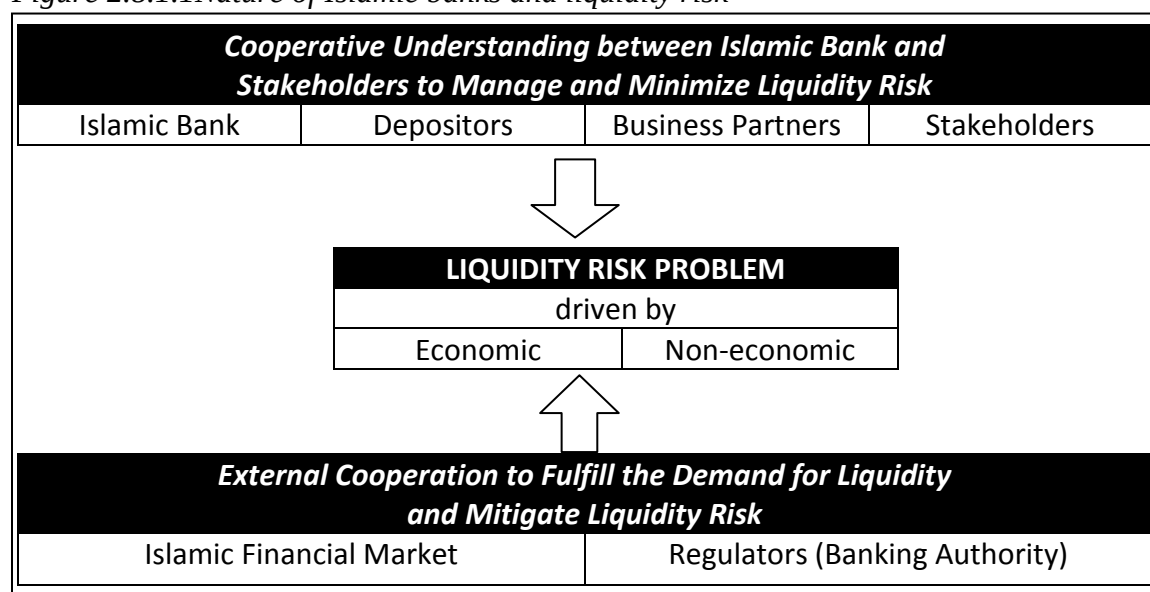
2.8.1 Nature of Islamic banks and liquidity risk

Antonio (1999) elaborated that an effective liquidity management system should be organized around real business transactions. The nature of Islamic banking business is that most of the transactions involve real assets and the contracts of these transactions are linked together to form a business life cycle that ensures healthy cooperation between different stakeholders and business partners. So, in an Islamic banking system, if harmony between stakeholders and

business partners continues, there is a low risk of a liquidity problem. In addition to disharmony, an economic downturn may also cause liquidity risk for Islamic banks. Figure 2.8.1.1 depicts the nature and liquidity risk credentials of Islamic banks.

Islamic banks try to adopt a systematic approach and minimize liquidity risk considering both internal and external perspective. The internal perspective deals with the Sharia principles and values, trusted business partners, shareholders and stakeholders and bank's management (Yaqoobi, 2007). Thus, internally Islamic banks ensure transparency, symmetric information, cooperation and support system and effective fund allocation in both assets and liabilities. Externally, Islamic financial markets and their unique mechanism are used to tackle liquidity risk problem. Islamic financial transactions attach some real asset with the transaction as a prerequisite of being Sharia compliant (Kahf, 2000), and in that way Islamic banks are involved in real business activities only. The Islamic banking system does not discriminate on real and financial aspects of the transactions. Lastly, regulators like central banks devise policy to balance the liquidity of the whole Islamic banking industry.

Figure 2.8.1.1 Nature of Islamic banks and liquidity risk



Sources: Rosly (2005); Obaidullah (2005); Iqbal and Mirakhor (2007).

Apart from that the most important thing in Islamic banking is that it is *riba* free. Further, other risks like *Gharar* (extreme uncertainty) and speculation are also avoided in the Islamic modes of transactions. Risk is shared equally between the parties involved and all the parties support each other; the Islamic way also forbids the parties to harm and seek defeat of other party (Quran, 26). Thus, the Islamic financial system is considered a viable option in the scenario of recent financial turmoil such as global financial crisis of 2008–09. Lastly, Islamic ways also forbid taking a speculative position against exchange rate and interest rate movements.

PLS is also a feature of Islamic banks: the parties to the transaction share the risk and this aspect also reduces liquidity risk. This PLS facilitates balancing assets and liabilities of the banks as PLS ensure understanding and concern of all parties to the transaction. But, sharing profit and loss makes the transaction more risky as cash flows of the transaction are not fixed and anticipation of such cash flows is also difficult. In such a scenario, certain rational depositors may be tempted to withdraw their money from the bank (Ismail, 2010).

So, due to the nature of their operations, Islamic banks have to bear various business and market-related risks like economic downturn risk, defaults risk, amortization, loss on asset risk and price fluctuating risk. These risks could sometimes disrupt the investment performance of the bank and asset-liability imbalance.

2.8.2 Risks faced by Islamic banks

Although Islamic banks have matured in many markets, there is increased concern on the alignment of Islamic banks with other banks in the market. The dynamics of the industry have imposed risk cautiousness and these dynamics include regulatory changes, financial

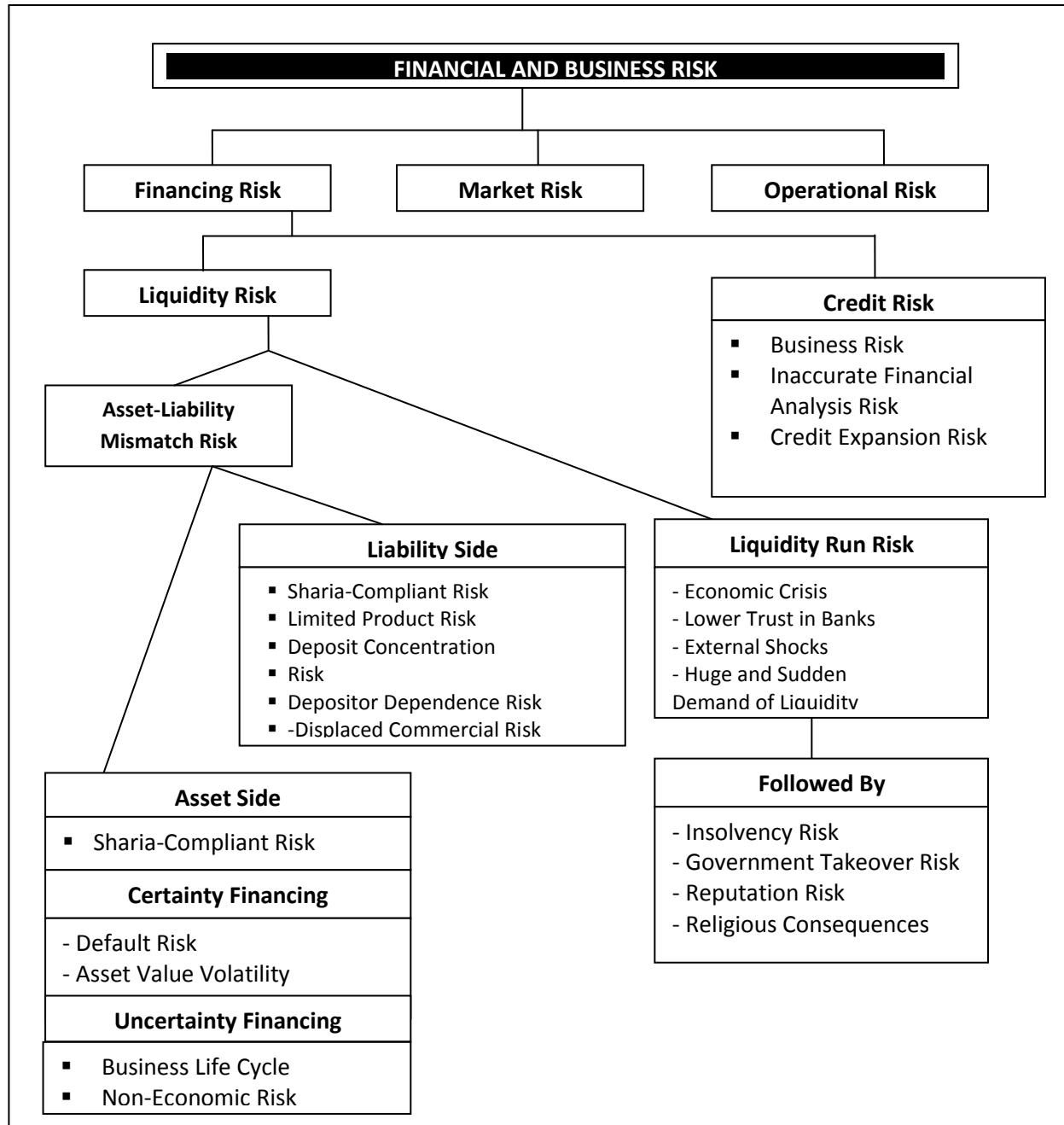
innovativeness, market volatility and interbank competition (Iqbal and Mirakhor, 2007). All of these external factors are an integral part of the financial market and are related to the external environment of the bank. Banks also have to focus on interconnections between various risks in the context of a bank's operations. However, it is not possible that liquidity risk can direct other risks like market risk, default risk and credit risk.

There are three main types of risks faced by Islamic banks: business risk, financial risk and liquidity risk; the main consideration is liquidity risk. Liquidity risk might occur because of asset-liability mismatch risk (arising out of unfavorable economic conditions and unsolved liquidity issues), credit risk (related to the ways by which banks manages their finances) and liquidity run risk (associated with failure of the bank to address its liquidity problems). Figure 2.8.2.1 summarizes the risks faced by Islamic banks.

Ismail (2010) with regard to the probability of credit default iterated that Islamic banks face the same kind of risks as conventional banks as any party to a contract could fail to honor their obligation according to an agreed schedule, terms and conditions. Such circumstances could disrupt the liquidity credentials of the Islamic banks and an imbalance could be witnessed between assets and liabilities of the Islamic bank. According to Ahmed and Khan (2007), Islamic banks faces commodity risk and market risk from asset side and this risk arises due to the fluctuating nature of the market value of assets. For example, foreign exchange fluctuations, inflation risk, volatility of prices of leased assets and inaccurate mark-ups could have credit risk implications and the liquidity of banks could suffer in accordance with the credit risk. Further, business risk is also associated with the credit risk of the corporations; the performance of a

bank's assets could be affected due to business risk as well. According to Karim (2006), downturn business trend risk, business failure risk and rate of return risk are examples in this regard.

Figure 2.8.2.1 Risks faced by Islamic banks



Sources: Modified from Ahmed and Khan (2007); Karim (2006b); Iqbal and Mirakhor (2007); Ismal (2010).

All of these risks, such as business risk and credit risk, cause liquidity risk, which in an extreme case convert into liquidity run risk. Primarily, liquidity run risk is caused by structural problems such as asset-liability imbalance or factors of a non-Islamic nature such as hostile market behavior, declining trust of investors in the bank, which might provoke cash withdrawals from the bank, economic instability and low return on deposit triggering displaced commercial risk. If a bank falls prey to liquidity run, it then has a limited range of options. A bank under the influence of a liquidity run has to manage its liquidity concerns in an active manner otherwise it may go insolvent.

The cycle of liquidity run also has the potential to damage the reputation of the bank and if such reputational concern is triggered, it could impact the whole industry in a negative manner. In Islamic banking industry, non-compliance to Sharia could trigger serious reputational concerns. Other factors which might cause reputational damage are related to governance, operations and business strategies of the bank. Antonio (1999) stated that when a bank gets hit by liquidity run, the government might take it over, which causes serious reputational and public image damage.

Liquidity risk might arise from both liability and asset sides of an Islamic bank. Examples include excessive reliance on return-oriented depositors, who seek to optimize their profits, such depositors shuffle banks quickly in expectation of earning higher returns and do not seek religious satisfaction by depositing their money in an Islamic bank, reliance on some big depositors, more reliance on short-term deposits and limited range of deposit products. Thus, these issues could create liquidity rift from the liability side of an Islamic bank. On asset side, liquidity problems are related to disturbances in both uncertainty and certainty financing.

Certainty financing includes trade-based contracts and these contracts generate a consistent stream of cash flows for Islamic banks. Such contracts could be infected by asset value volatility risk, commodity risk and default risk (Ismail, 2010). Examples of such contracts include *Ijarah* financing, which has many problems relating to the leased assets, then there are *Salam* and *Istasna* contracts which have non-deliverable object risk and risk of asset price fluctuation, lastly *Mudarabah* financing is also considered sensitive due to its short-term deferred payment options.

Uncertainty financing on the one hand, is based on investment-based contracts of Islamic banks and their cash flow stream is inconsistent. Cash flows of these investments are dependent on business circumstances such as industrial performance, macroeconomic environment and deeds of entrepreneurs. Islamic banks on the other hand are not exposed to interest rate risk as these banks operate under Sharia principles and values. There might be some indirect impact of interest rates as Islamic banks operate in the same macroeconomic environment, which to a large extent is influenced by interest rates in the economy (Ismail, 2010).

2.9 Liquidity Risk Management: Sharia Perspective

Islamic banking is differentiated from conventional banking on the basis of its Islamic mode of operations and compliance with Sharia principles and values. The main characteristic of being compliant with Sharia is prohibition of *riba* and acceptance of profit and the principle of risk sharing. Sharia accepts the prevalence of risk in all economic activities and it is stressed that this risk should accordingly be distributed among the related parties to a transaction, business or activity. Conventional banking business is purely based on interest, which is forbidden in Islam,

and Islamic banks propagate that their operations are interest free and based purely on risk and return sharing principles. The Sharia implications of liquidity management are now described.

2.9.1 Challenges to liquidity risk management

Certain challenges are faced by the current perspective on liquidity management in the Islamic banking segment; the major challenge in this regard is to understand that liquidity management in banks is more than the mere matching of liability side with asset side of a bank's balance sheet. There are associated considerations like availability of liquidity, risk mitigation and profit maximization (Antonio, 1999). Sharia seeks to conform to all three liquidity management considerations (i.e. availability of liquidity, risk mitigation and profit maximization) and all of these three considerations are met by balancing the asset and liability side of balance sheet of an Islamic bank. The issues on these two sides of the balance sheet are discussed in the following two subsections.

2.9.1.1 Liquidity management issues on liability side

The first and foremost issue at liability side of Islamic banking is associated with the nature and characteristics of deposits products being offered by a bank. Islamic banks normally offer Qard' demand deposits, Mudarabah time deposit and Mudarabah saving deposit. Details on the functioning of these deposits will be provided later; this section just elaborates on Mudarabah time deposit, which is a long-term deposit option and profits on this product are not certain, while depositors want to have a clear indication of future profits in advance. Further, these deposits are provided to a bank for long-run tenure and banks try to earn profit by investing these deposits. Thus, banks have to invest these funds in an optimal way in order to fulfill the return expectations of their depositors, who expect continuous and consistent returns on their deposits.

The external economic environment and business situation do not favor these odds much and this invites risk into consideration and profit on investments of such deposits fluctuates.

The second issue is the tendency of investors to repel losses on their deposits and the nature of an Islamic bank induces risk and return sharing and, in case of loss, it is borne by the investor. Under the Mudarabah contract, a bank offers Mudarabah time deposits, where bank is *Mudarib*; if any loss is realized by the bank in its investment in the long term it has to be borne by the depositor. Depositors in such a case do not want to sustain any loss on their invested money. In such scenarios, Islamic banks tend to cover the losses by utilizing a reserve fund which is also termed investment risk reserve (IRR; IFSB, 2005:23).

The next issue on liability side of liquidity management is also associated with the nature of deposits being provided by Islamic banks. Banks are recommended to set up a profit equalization reserve (PER); this fund is then used to ensure sustainable and stable payments as deposit returns (IFSB, 2005: 23). This fund is only maintained to deal with the tendency of investors to repel losses. If investors fully understand the nature and consequences of depositing money into Islamic banks, such a fund would not be recommended for the smooth operation and sustainability of Islamic banks.

Lastly, the product range offered by Islamic banks is limited. As indicated earlier there are three types of deposit products that are being offered by most Islamic banks: Mudarabah time deposits, Mudarabah saving deposits and Qard demand deposits. This product range is quite limited and to launch a new product, a bank has to assess demand for that product in the market.

2.9.1.2 Liquidity management issues on asset side

The main thing on the asset side is that central bank requires that banks maintain a liquidity reserve. Two types of reserves are required to be maintained in this regard: statutory reserve requirement and cash reserves. Statutory reserve requirements represent cash in the vault of cash reserve and it is retained by central bank in order to guarantee repayment of cash requirement (Ibrahim and Vijay Kumar, 2004). Cash reserves on the other hand are retained by the bank itself. This reserve is used to maintain daily cash demands of liquidity and to meet daily transactions.

The funds retained by central bank and cash retained at the bank are essentially idle and Islamic banks are required to maintain and manage these liquidity reserves, particularly cash reserves. This reserve is maintained by predicting the demand for liquidity in an accurate manner and keeping these funds invested. This also allows Islamic banks to locate idle funds in Islamic money market (e.g. Mudarabah interbank and Mudarabah interbank funds). The prediction of liquidity demand could be made by establishment of close relationships with the large depositors and thus, such depositors are encouraged to communicate their funding requirements in advance so that bank is better able to arrange appropriate liquidity.

In addition, banks tend to prefer short-term debt-based financing to long run equity-based financings. This preference is due to the complicated procedures, experience and knowledge required to handle such long-term equity-based financing. Sharia advocates earning of profit through long-term investment projects. Such investment projects should be a real financing option and there should be no element of *riba* (El-Din, 2008). Thus, Islamic banks are not able to

realize short-term benefits and arrange for liquidity from within the banking operations to match the demand for liquidity.

Entrepreneurs' default is another issue, where entrepreneurs are not able to meet their financial obligations on trade-based contracts. Ismail (2010) stated that the main issue is that Islamic banks cannot charge interest or penalties to defaulting entrepreneurs, but such defaults bring unproductivity to the portfolio of the bank and if such defaults are ignored, the behavior might spread to the overall portfolio of the bank. Such defaults could also occur in equity-based contracts. So, Islamic banks tend to choose their business partners carefully and have a well-diversified portfolio of financing. Further, Islamic banks have a strict monitoring mechanism to measure the performance of partners and anticipate probability of defaults.

Islamic banks also focus more on robust portfolio investments. This might not be that simple a task as Islamic banks and Islamic financial markets still are at their infancy and there are fewer alternatives available in the Islamic financial markets as compared to the conventional markets. Funds are extended to the clients in the shape of service-based financings, equity-based contracts and debt-based alternatives.

Extra liquidity is required in order to allocate more funds and yield more profits. Thus, the financing activities of banks might surpass their existing liquidity position and they might face difficulties in meeting their day-to-day liquidity requirements. Thus, a viable strategy in this regard is to attract new depositors with fresh money and maintain exiting liquidity position. The

operational requirements of liquidity should not be disturbed by availability of more investment alternatives.

Thus, overall, the ability of Islamic banks to manage their funds in an optimal manner is hindered by immature financial markets, less availability of liquid financial instruments and lower liquidity of long-term investments of Islamic banks as in Pakistan and Indonesia. The *Sukuk* market is still not that mature and is in an early stage of development. Further, availability of government sukuk, limited private sukuk and interbank Mudarabah agreement certificates is quite limited to date. Thus, Islamic banks face many limitations with regard to availability of Islamic alternatives and functioning of Islamic financial markets.

2.9.2 IFSB guidelines for liquidity risk management

According to Alsayed (2007), the liquidity management process of Islamic banks should be effective, credible and robust. In this regard, IFSB is an international body that provides guidelines to Islamic financial institutions for risk management. This organization has to date two publications in this context: ‘Technical Notes on Issues in Strengthening Liquidity Management of Institutions Offering Islamic Financial Services: The Development of Islamic Money Market’ and ‘Guiding Principles of Risk Management for Institutes Offering Islamic Financial Services Only’. These guidelines provide the basics of risk management principles for Islamic banks. Recommendations of the BASEL Committee on Banking Supervision (BCBS) and other credible standard-setting bodies are also incorporated in these guidelines.

These guidelines provide the basics of risk management for Islamic financial Institutions. Certain adjustments to the principles laid down by these publications could be made in order to accommodate for local financial environment and operations of business organization. These modifications sometimes are essential as the financial environment and liquidity infrastructure of every country is different from others; Islamic banks cannot take a standard procedure to manage their liquidity. There are also the regulatory aspects of the banking industry, which differ in every country and with which Islamic banking organizations must comply. So, the IFSB provided a generic set of guidelines, which could be modified and applied to accommodate the structural and operational context of each Islamic financial institute. The following discussion relates to the first IFSB guidelines issued in 2005 (IFSB, 2005).

2.9.2.1 General requirements

Principle 1.0 provides general guidelines on the policies provided by IFSB. This guideline states that financial institutes offering Islamic financial services would take part in reporting and comparative risk assessment process. This process would be guided by senior management and BOD or institute and these senior managers and directors would monitor, measure, identify, control and report different credentials and categories of risks and decide as to how much capital should be held against various risks of Islamic financial institutes. Further, the process of risk evaluation would also be guided by Sharia rules, values and principles and assurance of relating to the relevant risk reporting credentials would also be provided by appropriate supervisory authority.

2.9.2.2 Liquidity risk

Principle 2.1 states that Islamic financial institutions should have an appropriate liquidity management framework, which would report and consider their liquidity risk exposure on

separate account basis and on aggregate levels. The relative accounts', such as restricted and unrestricted investment accounts and current accounts, risk exposure shall be separately evaluated and accounted for. Principle 2.2 of the guidelines states that Islamic financial institutions shall consider liquidity risk in proportional relation to their ability to maintain appropriate resources in Sharia compliant funds in order to manage liquidity risk.

On account of liquidity risk management policies, IFSB highlighted credible considerations, which should be incorporated into liquidity management process of Islamic banks (IFSB, 2005).

Following are some of these considerations:

1. Liquidity management process should account for all strategies to manage liquidity-related risks and such strategies should be devised and/or approved by senior management and board of directors of that Islamic financial institute.
2. The process of liquidity management should also provide a working framework on development and implantation of valid processes concerning monitoring and measurement of the liquidity of Islamic financial institutions.
3. The system of liquidity management should monitor and report liquidity-related exposures after certain interval of time.
4. It should include funding alternatives and relative capacity of stakeholder to provide liquid funds when needed. It should also express the willingness of the stakeholder to provide additional funds.

5. Alternative mechanism of liquidity arrangement such as arrangement of sale and lease back and fixed asset realization should be covered by the liquidity management framework.
6. Finally, the plan should consider the mechanism to deal with liquidity crisis.

Subsequently, IFSB issued second guidelines in 2008 (IFSB, 2008), which are:

1. Islamic financial instruments, with appropriate characteristics, should be devised by both financial institutes and regulators. Government financing instruments and money market instruments could be used to deal with liquidity issues in an appropriate manner.
2. Develop Islamic government securities market and foster growth of public debt through Islamic government finance instruments.
3. Liquidity of Islamic financial institute could be managed through establishment and growth of Islamic money market whereby focus should be on using Islamic government finance instruments.
4. It is of utmost importance to develop market microstructure and effective trading mechanism for Islamic money market. Efforts to develop foreign exchange market should also be considered in this context.
5. Along with government Islamic financial instruments, Islamic financial institutions should also come forward to contribute towards development of Islamic money market instruments.

These IFSB guidelines stress two aspects of liquidity management for Islamic financial institutes. First is preparation of an effective and robust liquidity management framework and

second is development of Islamic financial markets, particularly money market, as they have implications in liquidity management context of Islamic financial institutes. The focus of this study is on the first aspect of liquidity management, which focuses on the liquidity management process at a micro level.

2.10 Liquidity Risk Management: Sharia-Based Approach

According to Askari et al. (2009), liquidity management is an important consideration for Islamic banks. Islamic banks interact with various stakeholders such as business partners, depositors, regulators and other financial institutions. Ismail (2010) iterated that risk management approaches highlight three aspects of funds flow under Sharia considerations:

1. First aspect is related to human behavior as banking is a business of trust and Islamic banks rely heavily on trust and risk-sharing principles.
2. Second aspect is related to harmonization of liability and asset side of Islamic banks.
3. Third aspect is measurement and monitoring of the liquidity management process of Islamic banks.

Thus, liquidity risk management in Islamic financial institutes is dependent upon the role and contribution of entrepreneurs and depositors, who interact with each other and upon harmonization mix of asset and liability and, lastly, on measurement and monitoring capability of Islamic banks.

2.10.1 Liquidity risk management and role of entrepreneurs and depositors

In Islamic banks, the liquidity management process is a dynamic process in which both entrepreneurs and depositors take part and, apart from Sharia compliance, this aspect also

differentiates Islamic and conventional banks. Sharia principles require that a depositor has to take part in the risk and he or she cannot take returns while avoiding the associated risks (Alsayed, 2007). A depositor has to accept any loss that might arise in the due course of investment activity conducted by Islamic banks. Entrepreneurs, on the other hand, cannot invest the borrowed money in non-Islamic business or in speculation or in businesses that do not have links with real assets or real business activities. Further, banks also take part in the risk of the entrepreneurs, whereby losses born by entrepreneurs are shared by the Islamic banks.

An important aspect of Islamic banking and Sharia are that both depositors and entrepreneurs are willing to restrain from prohibited activities such as *riba*, speculation, *Haram* trading and gambling (Quran, 5). Further, these parties also agree to take part in economic risks of the business. Thus, cooperation of all the parties involved in the transaction is required and such cooperation is built on trust of each other and understanding of Islamic principles and modes of businesses.

Entrepreneurs and depositors who are knowledgeable and cooperative are good partners of Islamic financial institutes and they also are helpful in mitigation of liquidity risk of the banks. Knowledgeable depositors are not return oriented, do not exhibit aggressive behavior and do not withdraw their money from Islamic banks on account of lower returns; likewise, entrepreneurs who understand the Islamic aspects of business are not involved in risky business like speculation and business of non-real commodities. Thus, knowledgeable depositors are ready to accept notions of PLS and they are also less likely to withdraw their deposits as they are not motivated by returns but by the nature of their investment.

2.10.2 Liquidity risk management: Roles of Islamic banks

In accordance with the guidelines provided by IFSB, Islamic banks develop their own liquidity risk management framework. This framework incorporates the following aspects of liquidity management:

1. It entails appropriate risk management policies and practices.
2. It outlines the process of measurement and monitoring of liquidity risk like how to balance financing and findings aspects of liquidity, how to monitor business partners and relative projects and how to account for unexpected economic outcomes.
3. Ensuring that all banking operations are being conducted in accordance with the code of Sharia and Islamic spirit. Islam should pervade every business decision of the banks as they should select the entrepreneurs doing *Halal* business etc.

2.11 Monitoring and Measurement of Liquidity Risk

Islamic banks maintain adequate liquidity reserves in order to deal with liquidity-related uncertainties and problems. The appropriateness of the fund should regularly be reviewed and revised in order to better cater for the uncertainties, economic conditions, market conditions and scope of an Islamic bank's operations. Islamic banks should first calculate liquidity shortfall by building maturity ladders on different time intervals and after that the limit of liquidity reserves should be decided and maintained. Islamic banks can develop a classification scheme to differentiate between different types of cash flows in the manner prescribed as follows (IFSB, 2005):

1. Known cash flows: These are the cash flows which could accurately be predicted in advance like receivables from diminishing Musharakah, Ijarah and Mudarabah.

2. Conditional and predictable cash flows: These are the cash flows which are predictable but are conditional on the basis of type of the contract or on the basis of performance for a stipulated time period.
3. Conditional and unpredictable cash flows: These are the cash flows which are not predictable in advance and further these cash flows are contingent on the performance of an economic entity. Musharakah contracts fall under this category.

In order to monitor and measure liquidity risk, Islamic banks have to constantly monitor their cash flows from different projects or businesses and patterns of cash withdrawals. Further, future payment structure should also be determined by forecasting payments in advance and estimating cash receipts (Fiedler, 2000).

Thus, cash flows of Islamic banks could be segregated into two distant categories: certain and uncertain cash inflows. Certain cash flows are generated from debt-based contracts and uncertain cash flows are generated from equity-based contracts. Considering outflows, certain outflows arise out of time-based deposits, while uncertain cash outflows arise out of cash withdrawals of depositors from demand deposits.

2.12 Sharia-based Islamic Banking Operations

The operations of Islamic banks must be aligned with Sharia principles and these should be carried out in a prudential manner. Islamic banks have a responsibility to behave in a consistent and optimal manner while conducting banking operations and interacting with stakeholders.

Proper management of assets and liabilities is imperative in this regard. The details of this management are provided below.

2.12.1 Sharia-based liability management

As described earlier, Islamic banks maintain three kind of deposits: demand deposits, Mudarabah time deposits and Mudarabah saving deposits. Islamic banks get implied or expressive authorization to use the money deposited into the account. They do not pay the profit to the customer holding the demand deposits (Obaidullah, 2005). In the case of Mudarabah saving deposits, the money is invested in Islamic projects and profits are then shared with the depositors.

Further, Mudarabah time deposits have two kinds, whereby one kind is termed as restricted time deposits and the other is unrestricted time deposit. In restricted time deposits, Islamic banks just act as fund manager or non-participating Mudarib (El-Din, 2004). Under this type of time deposit, banks cannot mix these time deposits with their funds unless permitted by depositor. These deposits are considered to be off-balance sheet account. Unrestricted time deposits, on the other hand, do not restrict banks from using them or managing the funds. The risk is shared with the bank under this kind of agreement (Graisand Pellegrini, 2006).

The liquidity of the banks considering all three kinds of deposits is ensured by the availability of an appropriate standby liquidity reserve. Further, it is recommended that:

1. Islamic banks must match deposit type and tenure with the type and tenure of project to be financed.

2. Monitor funds availability from liability side and fund requirements at asset side.
3. Account for the maturity of deposits with termination of the project or investment.

The first consideration suits restricted type of deposits while second and third considerations are suitable for unrestricted kind of deposits. Thus, the liability side of Islamic banks could be managed by balancing the liabilities with cash-generation capabilities of assets.

2.12.2 Sharia-based asset management

Islam permits trade and prohibits *riba* (Quran, 2:275). This notion forms the foundation stone of Islamic banking. Islamic banks opt for three modes of investments: benevolent loans and services, debt-based advances and equity-based advances. Examples of equity-based advances include *Mudarabah*, *Musharakah*, *Musqaqah* and *Muzara'ah* (Antonio, 1999). Examples related to debt-based advances are *Qard*, *Istisna*, *Salam*, *Ijarah* and *Murabahah*, while examples of benevolent loans and services are *Kafalah*, *Wakalah* and *Hiwalah* (Obaidullah, 2005).

For asset side management, the following recommendation could be made to Islamic banks:

1. Determine the project nature and fund requirements for the project.
2. Match cash flows from the project with the cash flows from liability side in order to balance things out.
3. Select entrepreneurs after careful analysis and due diligence.
4. Initiate joint financing with other Islamic banks so as to diversify the risk.
5. Build a cooperative financing relationship with all business partners.

The first two recommendations are proposed in line with the internal investment policy of the Islamic banks, while the other recommendations are related to third party contracts such as other Islamic financial institutions and entrepreneurs. Considering an Islamic bank's relationship with

other stakeholders, trust, building reputation and establishing good networks are deemed very important factors.

2.13 Mitigation of Liquidity Risk: Sharia Perspective

Ismail (2010) stated that depositors withdraw their money from Islamic banks in the following circumstances:

1. Lower rate of return on deposits
2. Non-compliance with Sharia principles
3. Financial credibility of the bank.

There are some Sharia-based ways to manage liquidity-related issues of Islamic banks. These techniques work in the following conditions:

1. A consistent liquidity demand
2. During unpredictable irregular liquidity demand
3. During predictable irregular liquidity demand.

Under the consistent demand for liquidity situation, liquidity of the bank could be managed using internal liquidity management policies of the Islamic banks. Examples include maintaining liquidity reserves, entering into liquidity contract with parent company, reducing default risk of both equity and debt-based financings and sequencing deposit maturity according to the time. During predictable irregular liquidity demand scenario, Islamic banks rely on external liquidity management policies and Islamic financial markets are utilized to raise liquidity using short-term financial instruments. Lastly, for predictable and irregular liquidity demand, an Islamic bank has to arrange additional liquidity from external sources such as government, central bank and other

parties. Then there is Sharia principles, which are also, coded techniques of liquidity risk management:

1. No monetary reward is sought on maintained liquidity reserve as any reward on unutilized money is equal to *riba*. Conventional banks earn interest on maintenance of this reserve from central bank.
2. Entrepreneurs are considered business partners of the bank and both share risk along with profits and losses arising in the normal course of business.
3. In case of emergency, central bank provides funds, which also are free of any charge or interest and is termed as *Qard Hassan* and no interest is paid on these funds.

2.13.1 Tackling regular demand for liquidity

Regular demand for liquidity could be tackled using the following techniques:

2.13.1.1 Maintenance of liquidity reserves

Each bank, whether Islamic or conventional, has to maintain a liquidity reserve. This reserve is used to meet the regular liquidity demand of the depositor. This way of managing regular demand for liquidity is the same as conventional banks. As detailed previously, Sharia does not allow Islamic banks to charge any interest over the liquidity reserve, while conventional banks charge interest on the reserves maintained with central bank. Additional liquidity requirements from central bank are also interest free and take form of *Kafalah*, *Qard Hassan* or *Wadiah*.

2.13.1.2 Sequencing the maturity time of deposits

Islamic banks could finance the projects with fixed tenure and this allows Islamic banks to sequence the time deposits in accordance with the project termination. Islamic jurisprudence in

this regard provides concept of constructive liquidation (Obaidullah, 2005). This technique values the asset after periodic intervals by excluding all liabilities from the value of the asset. Using this technique, maturity of time deposits could be sequenced and matched in accordance with the constrictive liquidation of the asset.

2.13.1.3 Profit-and-loss sharing mechanism

All the losses and defaults are not borne by the Islamic bank and relative risks and losses are transferred to partners and depositors of the bank. In order to avoid losses, Islamic banks have to monitor, control, audit and evaluate the performance of the ventures they have invested in. But in cases in which a partner (Mudarib) does not share the return with Islamic bank (*Shahib-ul-Maal*) in a fair and consistent manner, Islamic banks can penalize such behavior (Obaidullah, 2005) and the penalty amount is donated to charities. Islamic banks also ask for collateral or guarantor to ensure consistent behavior of the client who receives the money (Iqbal and Mirakhor, 2007).

2.13.1.4 Avoiding defaults in debt-based contracts

In Islamic banking, debt-based finance is associated with some object or asset like in leasing (*Ijarah*), the asset is considered *Amanah* (Ayub, 2007). No amount is recovered by the Islamic bank if the asset is destroyed, except when the destruction is found to have occurred due to negligence of the lessee. But, in a *Murabaha* type of contract, the ownership is transferred to the purchaser and the risk of destruction does not lie with the Bank (Ayub, 2007).

In case of payment defaults under the contracts of *Murabaha* or *Ijarah*, an Islamic bank can choose one of three alternatives: it can allow extra time for payment, it can force lessee to pay immediately by nominating the lessee liable for loss, theft or damage of the asset or it can sell

the asset in the open market to generate funds. Alternatively, an Islamic bank could insure the asset using Islamic insurance (Ayub, 2007).

2.13.1.5 Entering into liquidity agreement with parent company

Some conventional banks opt to open an Islamic window as a preliminary step to venturing into the Islamic banking segment of the market. Such situations necessitate parent–subsidiary relationship. Under such a scenario, the parent company agrees to provide additional funds to the subsidiary in case of emergency needs (IFSB, 2005). This is an efficient and quick means to arrange liquidity for Islamic banking windows.

2.13.2 Tacking predictable irregular demand for liquidity

Certain Sharia-compliant techniques are also used to tackle predictable irregular demand for liquidity. Development and execution of short-term and long-term financial instruments and arranging money from Islamic money market are viable options under this scenario.

Selling securities in the financial markets is hindered by lack of repurchasing facilities from Islamic central banks, underdeveloped nature of Islamic financial markets, lack of availability of Islamic financial instruments and less Islamic players in the market. So, as an alternative, Islamic banks could borrow from Islamic money market. Following is a description of each alternative.

2.13.2.1 Sales of short-term Islamic securities

There are short-term liquid certificates that could be sold in Islamic money market with ease for liquidity arrangement; such options include Mudarabah redeemable certificates (Ahmed, 2001). Repo (repurchase commitment) is used to liquidate the certificate in the Islamic money market. Then there is BA, which guarantees future payment to the holder of the instrument (Ahmed, 2001). An Islamic bank acts only as agent and gets fees/commission for the flotation services

provided. In case of emergency, BA could be sold in the secondary market. Then there are Wakalah instruments, whereby an Islamic bank also serves as agent of the investor. The funds are invested according to the direction of *Muwakil* (investor) and a fix fee is charged for this facilitation. A Wakalah contract has two extensions: restricted and unrestricted Wakalah (Iqbal, 2008). The next financial instrument in this regard is Murabaha. The Sharia compliancy of this instrument is disputed among Islamic scholars (Ayub, 2007). This contract allows a banker to sell a commodity that is not yet in the ownership of the bank. This contract is acceptable in money market and many Islamic banks utilize this for their liquidity management. So, such contracts would be bought and then sold when there is need of funds. Another alternative is cross-currency swap instruments, which are used by Islamic banks to manage their foreign exchange risk exposure (Ismail, 2010). Swaps allow two parties to exchange a stream of payments in one currency with a stream of payments in another currency. Lastly, there are private asset securitization options which could also be utilized for liquidity management (Ayub, 2007). This type of security is considered ideal for matching predictable demand for long-term liquidity requirements.

2.13.2.2 Sales of long-term Islamic securities

Islamic banks could also sell long-terms securities for their liquidity requirements. Such securities include securities of central bank or government bonds. Such certificates are tradable in the secondary market if the holder of these instruments needs funds. One example of this sort of contract is Islamic Leasing Investment Fund (ILIF), which is a government security and is utilized to finance public projects using *Ijarah* conception of Sharia (Kahf, 2000). Benefits of the security are that it is trade-able in money market, it provides pro-rated profits on projects and return on this security is fixed. Apart from this, there are other alternative Islamic government or

central bank securities. Government securities are termed Sukuk, which are issued under Salam, Ijarah, Musharakah and Mudarabah contracts and securities of central bank are termed central deposits, which are issues under debt-based or equity-based financing contracts and are part of monetary policy of central bank (Al Jarhi, 2004). An example of such securities is Musharakah certificates issued by Central Bank of Sudan in 1998.

2.13.2.3 Opting for Islamic money market

Lastly, Islamic banks could opt to arrange liquidity from Islamic money market. There are certain examples that are used to endorse borrowings from Islamic money markets, for example Inter-Bank Mudarabah Agreements used in Indonesia as money market instruments are traded between Islamic banks. The main issue while borrowing from the money market is that the borrowing Islamic bank should have good relationships with other banks, but opting for money market can often damages the reputation of the Islamic bank. Iqbal and Mirakhor (2007) provide examples of Islamic money market like Liquidity Management Center (LMC) and International Islamic Financial Market (IIFM). Members of these markets could easily arrange liquidity from these markets.

2.13.3 Tackling the unpredictable irregular demand for liquidity

Unpredictable irregular demand for liquidity is considered a special case for liquidity management and the options available under this scenario are government bailouts, central bank emergency liquidity reserve, shareholder lending and parent company lending. The last two options are the quickest way to arrange for liquidity for Islamic banks. But arranging funds from these two options requires the owners to trust the management of the Islamic bank, as management has to provide an explanation as to why an emergency fund is being demanded. Conventional banks could also utilize these options.

The remaining two options of government bailout or asking for emergency liquidity reserves from central bank have serious reputational risks for Islamic banks. These options should be considered the last options in the hierarchy of liquidity management practices. If the funds are arranged from the central bank, these should be arranged on the basis of Sharia agreement as Tabarru' (Quran, 2:176). These funds have strict pre-requirements from the central bank, for example a central bank might ask an Islamic bank to pay a penalty if they fail to make repayment as due, provide liquid collateral, or maintain healthy performance indicators. Siddiqi (1994) stated that emergency fund provision could function as a control mechanism for central bank to control demand and supply of short-term liquidity in the market. Lastly, government bailout package is offered by the government for banks undergoing severe liquidity stress. The main objective is to mitigate the negative impact of the liquidity stress to the whole market. Such bailouts were largely provided during the global financial crisis of 2008–2009, when there were serious threats to the whole financial system of the world's economy. The US government in this regard took over many banks and injected funds as liquidity to incubate these defaulting banks. A bailout might have consequences like the termination of the role of bank from the economy, termination of all short and long run investment contracts and ceased banking operations.

Overall, Islamic banks have unique operations and liquidity management approaches, which should always be Sharia compliant. Islamic banks engage various stakeholders, while managing their liquidity credentials. These stakeholders include business partners, regulators, other banks, depositors and government and their liquidity management program could best be described as a participatory liquidity risk management program. Lastly, an Islamic bank relies on various policies and techniques to manage regular and irregular demand for liquidity. The process on the whole is complex, sequential and integrated.

2.14 Research Hypothesis

- 1) There is a relationship between return sharing paid to depositors and Islamic deposits.
- 2) There is a relationship between Income from operational financing and Islamic deposits.
- 3) There is a relationship between cost of banking operations and Islamic deposits.
- 4) There is a relationship between lag of total Islamic deposits and Islamic deposits.
- 5) There is a relationship between return sharing paid to depositors and investments in operational financing
- 6) There is a relationship between Income from operational financing and investments in operational financing
- 7) There is a relationship between profit from non-operational financing and investments in operational financing
- 8) There is a relationship between cost of banking operations and investments in operational financing
- 9) There is a relationship between total investments in all financing and total liquidity reserve.
- 10) There is a relationship between total profits from operational financing and total liquidity reserve.
- 11) There is a relationship between per centage of revenue sharing on deposits and total liquidity reserve.
- 12) There is a relationship between lag of total liquidity reserves and total liquidity reserve.

Chapter 3

Research Methodology and Method

3.1 Introduction

In this chapter the types of research methodology are briefly explained. After this, research strategy and research design will be elaborated.

First, a conceptual framework was developed through a literature review. Then this conceptual framework was tested using primary and secondary data along with interviews conducted with depositors of Islamic banks and Islamic bankers of Pakistan.

Three types of data were collected for the study: quantitative data from the annual reports of the Islamic banks, quantitative data from close-ended questionnaires from both depositors and Islamic bankers in Pakistan, and qualitative data from semi-structured interviews with both depositors and Islamic bankers in Pakistan.

Quantitative data were collected to testify three liquidity models. The first model provides insight into the liquidity behavior of the depositors: liability model. The second model investigates the liquidity behavior of Islamic banks: asset model. The third model tries to establish the determinants of liquidity reserves in Islamic banks: liquidity reserve model. The estimation of this part is conducted using E-Views and panel estimation technique using random and fixed effect is applied on this data in order to assess liquidity dynamics of Islamic banks in Pakistan.

The surveys were conducted to assess the opinion of both Islamic bankers and Islamic bank depositors on market success and liquidity management of Islamic banks.

The semi-structured interviews with Islamic bankers and Islamic bank depositors were conducted to provide a detailed insight into the liquidity management process and perspectives of both managers and depositors of Islamic banks.

Research Method		Triangulation (Validation) Method (Williams, 2007)
Sampling	Primary Data	Stratified Random Sampling
	Interviews	Snowball Sampling
Research Data	Survey	Islamic bankers & Depositors
	Secondary Data	Financial Statements
	Semi Structured Interviews	Islamic bankers & Depositors
Methods of Analysis	Primary Data	Frequency Table
	Secondary Data	Panel Data Econometrics (Fixed and Random Effect Model)
	Interviews	Thematic Analysis
Sample Size	Primary Data	300 sample size of Islamic bankers, 300 sample size of Islamic Depositors (Khattak, 2013)
	Secondary Data	From Year 2006 to 2015 (Abdullah, 2012)
	Interviews	15 Interviews conducted from Islamic bankers 15 Interviews conducted from Islamic depositors (Yang, 2009)
Response Rate	Primary Data	88 per centage response rate from Islamic bankers, 90 per centage response rate from Islamic depositors

Table 3.1 Methodology of Research Studies

The findings are then discussed along with a synthesis of the research. Implications concerning liquidity management in the Islamic banks of Pakistan are then presented. The thesis concludes the research by providing an overview of findings, recommendations and directions for future research.

This research study is based on certain presumptions relating to current economic and business conditions. In this study it is considered that the Islamic banking industry of Pakistan is a fast growing industry but it needs improvements. Therefore more research studies are required for the exploration and empirical investigation of the Islamic banking system of Pakistan. This thesis investigated the role of depositors and Islamic bankers along with other key factors that affect liquidity risk in Islamic banks of Pakistan but it did not explore the perceptions, understanding and awareness of Islamic banking in Pakistan. Also, this thesis did not investigate the effectiveness of roles of Shariah Board, government agencies and academicians in relation to Islamic banking capitalization and investments.

3.2 Research Methodology

Gray *et al.* (2007) described research methodology as “the study of research process itself – the principles, procedures, and strategies for gathering information, analyzing it, and interpreting it”. In other words, research methodology is a “systematic controlled, empirical, and critical investigation of natural phenomena guided by theory and hypothesis about the presumed relations among such phenomena” (Sullivan & Rassel, 1989). Research methodology is based on two main paradigms: quantitative research methodology and qualitative research methodology. Some researchers use a mixed method study.

3.2.1 Quantitative research methodology

In general, “quantitative research emphasizes ordinal measures and numbers” (Gray *et al.*, 2007). In particular, “quantitative research methodology attempts to establish formal relationships between related variables. It is mostly guided by positivist philosophy” (Asutay, 2008). The

positivistic paradigm is a social philosophy: “quantitative researchers generally accept the goal of developing an understanding that correctly reflects what is actually happening in the real world, some quantitative researchers instead emphasize the goal of developing an authentic understanding of a social process or social setting” (Gubrium & Holstein, 1997).

A specific social problem under consideration can be explained by the quantitative research method by using primary and secondary data. The process of quantitative research is to determine objectives; from objectives the research questions are prepared. Once the research questions are prepared then from them the hypothesis are formulated. Then the relevant data are collected either from a survey or from secondary sources. Afterwards, by analysis and interpretation and testing of hypotheses, the final output clearly explains the social problem and offers a suggested solution.

3.2.2 Qualitative research methodology

The interpretivism paradigm is used for qualitative research methodology. Interpretivists think that reality is subjective (Lynch & Bogen, 1997). Qualitative research explores social phenomena. In qualitative research different empirical alternatives are used to collect and interpret data, such as life histories, observation and interviews, surveys with semi-structured or constructed questionnaires, group study, case study and visual text (Denzin, & Lincoln, 1994). Qualitative research basically explores a social problem through natural setting (Creswell, 1994) and that natural setting is based on the behavior of people, real conditions, facts and figures. Hence quantitative and qualitative research differ from one another as the former uses objective approaches to data collection whereas the latter uses subjective approaches to data collection.

Positivists believe that social interaction creates bias in a study so society's view is not important to research, whereas qualitative researchers believe that a problem is societal so society and its interpretations are considered vital to problem analysis.

3.2.3 Research methodology of the PhD thesis

This thesis is titled 'Liquidity risk management in Islamic banks'. The liquidity risk and management of risk is analyzed through quantitative research. A triangulation (validation) method of research is used for the final outcomes of the thesis. A survey through a questionnaire administered to Islamic bankers and depositors is done. Secondary data are also collected from the annual reports of Islamic banks for validation of variables. In addition, interviews are conducted with Islamic bankers and depositors to authenticate data and results.

3.3 Research Method

"Research method in social science can be defined as a systematic research process to study a specific social object with certain research techniques employed for such a purpose. Research method deals with quantitative techniques such as statistical correlations as well as qualitative techniques like observation, interviewing and audio recording" (Silverman, 2000).

"Researchers typically select the quantitative approach to respond to research questions requiring numerical data, the qualitative approach for research questions requiring textual data, and the mixed methods approach for research questions requiring both numerical and textual data" (Williams, 2007).

According to the Studentmund (2005), the research method that provides effective and useful information, from where some useful measures can be prepared is considered as most reliable methods of Research. Therefore the method is reliable or not is based on the relevance of information means it should be taken out at lower cost and practical manner, whether it is accurate or not, and whether information is credible and useful for the results preparation (Studentmund, 2005).

3.3.1 Quantitative method

The quantitative research methodology is independent of researchers and biases because it is based on numerical data to which a statistical approach is applied (Williams, 2007). The data in a quantitative paradigm is objectively measured through questionnaire and surveys. The positivism paradigm is used in quantitative research methods (Creswell, 2003).

A quantitative approach is used when mathematical and statistical tests are used to confirm any phenomenon or relationship with different variables. Such relationships can be considered or measured through correlation and regression tests using SPSS software. The questionnaire or survey approach is used to collect data; in this approach, researcher bias is at a minimum because there is no direct interaction between the researcher and the respondents.

3.3.2 Qualitative method

In qualitative research the main purpose is to describe and interpret the collected data into useful information (Williams, 2007). Therefore “qualitative is related to know about social setting that can be essential for understanding patterns in quantitative data” (Campbell and Russo, 1999).

Qualitative research methodology deals in five different specifications: phenomenological study, case-based study, grounded theory, ethnography study and content analysis (Williams, 2007). Qualitative study is inductive based and descriptive. Such study is mainly used to build new theories and formulas (Leedy and Ormrod, 2001).

3.3.3 Research method of the PhD thesis

In this study, liquidity practices and their management are analyzed using mixed methodology. Using these methods, the perceptions and understanding of risk of liquidity is tested for Islamic depositors and Islamic bankers in the context of Islamic banking.

The benefits of secondary data analysis are:

- i. These models reflect economic reality.
- ii. Testing and concluding hypothesis.
- iii. Forecasting of economic stance for the future (Studentmund, 2005). Basically, econometrics is a tool which analyzes the empirical and economic activity for making an economic decision (Gujarati, 2004).

Besides the benefits of econometric analysis, there are some drawbacks or weak points of the analysis: (Enders, 1995)

- i. Always assumptions are designed for explaining the equations.
- ii. In every equation the error components cannot be ignored.
- iii. The secondary data relating to liquidity management of Islamic bank is limited.

Closed-ended questionnaires were used to find out the depositors' behavior regarding liquidity and liquidity withdrawal, and closed-ended questions were used to examine Islamic banks' liquidity risk management techniques and how they control them. In addition to the

questionnaires, interviews were also conducted to validate the questionnaire. The interviews were conducted with both Islamic bankers and depositors.

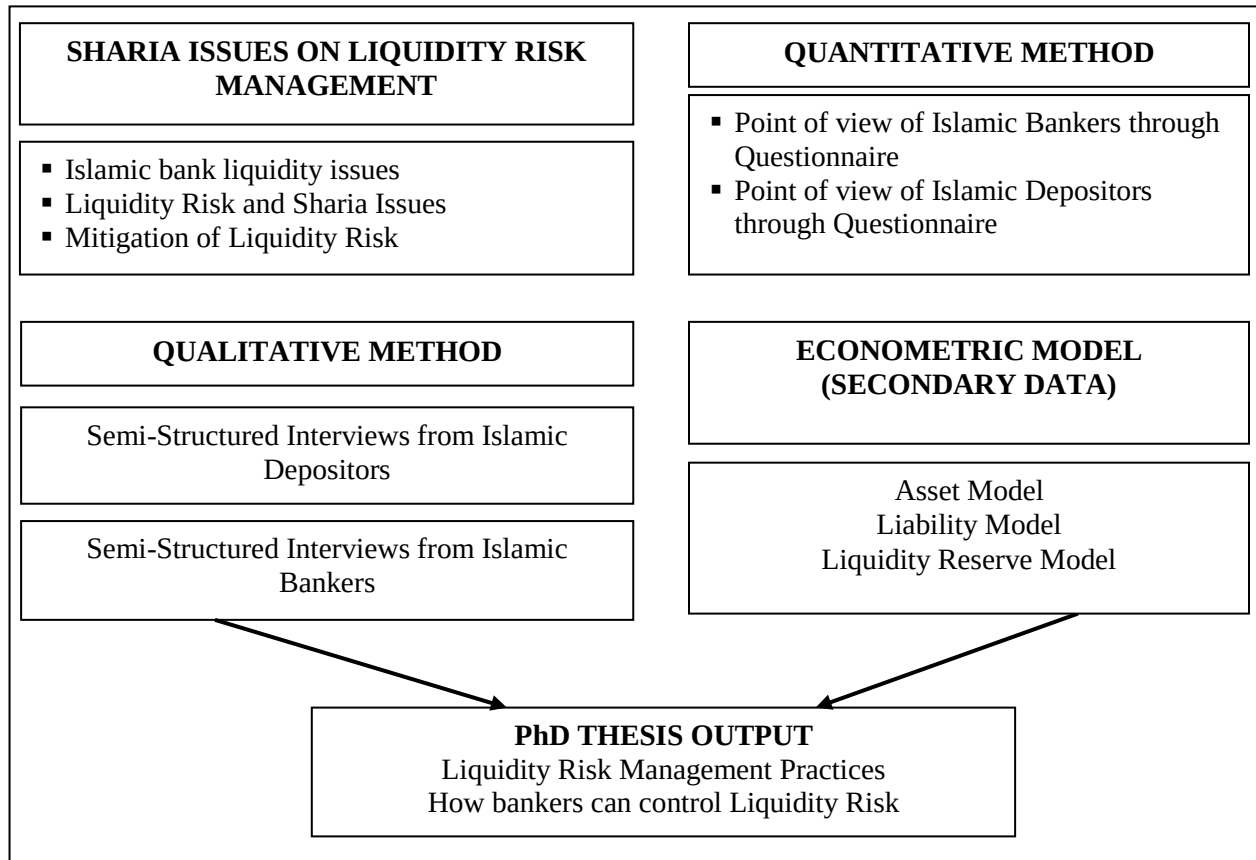
Further, related data were collected from other sources, like books published on Islamic finance and banking, documents published on Islamic finance and banking, documents published by SBP. In addition to data collection, there was qualitative data analysis, themes, thematic analysis, discussion, synthesis and conclusion along with the future research directions.

3.4 Research Design

This research project is based on two different approaches namely a literature review approach and an empirical approach. In the literature review approach, the existing literature was evaluated to derive the variables and Shariah principles were reviewed regarding their applicability to Islamic banks. The second approach was related to empirical investigations (see Figure 3.4.1). In empirical investigations, different variables were checked and their relationship with liquidity risk was measured. The assets, liabilities and reserve models were investigated and measured. These models contain secondary data and through E-Views the data were analyzed, besides that a survey method was applied. Through closed-ended questionnaires, data were collected from Islamic bankers and depositors.

In conducting this research, obstacles were faced. First, the analysis was difficult because the Islamic banking industry is at an early stage of development. Second, the Islamic instrument money market is fully developed and the Islamic investment money market is not fully developed. Third, depositors' withdrawals and deposits have no pattern. Following is a depiction of the research design that has helped to reach the conclusions for this thesis.

Figure 3.4.1 Research design



3.5 Research Strategy

The research strategy for this thesis is deduction strategy. First of all the problem is the liquidity risk management of Islamic banks of Pakistan. For problem resolution, three objectives were devised. To fulfill the said objectives a review of the literature was made. After reviewing the literature on Islamic banking rules and Shariah principles different variables were derived from the literature. These variables were tested through secondary data using E-Views software. Besides that a survey was conducted with Islamic bankers and depositors. Semi-structured interviews were conducted with Islamic bankers and depositors for more accurate evidence. Then the data were analyzed and synthesized. Finally, recommendations were made.

3.5.1 Questionnaires and respondents

Two questionnaires were conducted to assess the opinion of both Islamic bankers and Islamic bank depositors in the context of market success and liquidity management of Islamic banks. The first questionnaire was given to the depositors of Islamic banks and the second questionnaire was given to Islamic bankers of Pakistan.

The respondents who participated in the bankers' survey were different bankers like branch manager, risk manager, business development manager, marketing head and other team members. In total, 265 Islamic bankers participated in the survey.

The Islamic bankers engaged in the survey used in this research study came from the following Islamic banks of Pakistan:

- i. Meezan Bank Limited,
- ii. Burj Islamic Bank Limited,
- iii. Dubai Islamic Bank Limited,
- iv. Bank Islami Pakistan,
- v. Albaraka Islamic Bank Limited.

Depositors of Islamic banks were also surveyed; they came from different provinces and big cities of Pakistan like Lahore, Karachi, Islamabad, Quetta, Multan, Gujranwala, Peshawar, Faisalabad and Rawalpindi. In total, 270 depositors participated in the survey.

Random sampling was used for data collection from the Islamic bankers because there are few Islamic banks.

As far as the depositors are concerned, maximum number of depositors of Islamic banks was holder of academic degrees and hence it was easy to gather data from them.

First of all it is necessary that respondents understand a questionnaire so that they should be able to give correct information. Therefore the researcher briefed the respondents so that they clearly understood all the questions of the questionnaire.

The researcher included those questionnaires in the study analysis which were complete in all respects, whereas incomplete questionnaires were ignored and were not a part of this study.

A total of 270 respondents responded to the first survey of Islamic bank depositors. The survey contained questions related to awareness and knowledge of Islamic banking, differences between Islamic and conventional banking, investment motive in Islamic banks and their liquidity-related behavior. First part of the analysis provides description of the education of the sample as to assess whether the respondents were educated or not? After that, questions on the usage and awareness of Islamic banking products were provided, and then the motive of a depositor to use Islamic investments was highlighted and, lastly, the opinion of the respondents as to when they might exit Islamic banking was requested.

A total of 265 Islamic bankers responded to the second survey questionnaire. The survey contained two parts whereby the first part explored the organizational structural aspects of Islamic banks in relation to liquidity risk management. The second part of the survey enquired

about the Islamic bankers' responses to the risk management practices adopted by Islamic banks in Pakistan.

3.5.2 Designing the questionnaire

Keeping in mind the end goal of getting feedback from respondents and accumulating the required data, the questionnaire was delineated as clear, concise and closed ended. Relevant questions were asked in the questionnaire, such as strategic issues related to liquidity deposits and depositors' withdrawals from Islamic banks. The researcher avoided questions that were considered sensitive or could be confidential from the point of view of the depositors.

The questionnaires were adapted (Ismal, 2010) and amended. Both questionnaires (i.e. Islamic bankers and depositors) were presented to the research supervisors for amendments and approval. Then with the help of a pilot study of 30 questionnaires forwarded to depositors and Islamic bankers the questionnaires' reliability and validity were tested.

The approved questionnaires had the following scales and content:

- i. The questionnaire relating to Islamic bankers is designed for getting information from the Islamic bankers. There are three portions of this survey form. The first one relates to the organizational structure of Islamic banks. In this portion different dichotomous questions were asked, for example
 - a. Special Division/Team dealing with risk management,
 - b. Particular Director/Manager responsible for liquidity management,
 - c. Coordinate liquidity management decision with the SBP,

- d. Depend on SBP decision (direction) to manage liquidity risk problem.
- ii. The second portion is related with the liquidity risk management techniques. In this portion different statements were given and responses to the statements were to be given using a 5-point Likert-type scale.
- iii. The third portion is related with an open-ended question suggesting that “In case of any other information regarding liquidity risk management in your bank, please write”.
- iv. Furthermore the questionnaire relating to the depositors of Islamic banks is designed for getting information from the depositors. There are five portions of this survey form. The first one relates to the education level of the depositors.
- v. The second one concerns information from depositors of Islamic banks. In this portion different dichotomous questions were asked.
- vi. The third portion relates to the intentions of depositors of Islamic banks. In this portion, different statements were provided that required a response using a 5-point Likert-type scale, for example:
- vii. The fourth portion concerns the risk of withdrawals by depositors of Islamic banks. In this portion different statements were made to which answers were given using a 5-point Likert-type scale.
- viii. The last portion is related to an open-ended question suggesting that “In case of any other information regarding liquidity risk management in your bank, please write”

3.5.3 Primary data collection process

The primary data are collected through the questionnaires. The questionnaires were prepared for Islamic bankers and Islamic depositors. The survey forms were self-administered. For effective

data collection it was necessary that the researcher should know all the variables and why the data are being collected.

There are advantages to self-administered data collection through survey forms. First, the researcher can give a briefing about the objectives of the study, problem identification and questionnaire questions to the respondents of the study. Second, if there is any ambiguity about any question then such ambiguity can be clarified at once by the researcher (Sekaran, 2003).

The data collected through the questionnaires were from respondents from the big cities of Pakistan. The data were collected from all the four provinces of Pakistan namely Punjab, Sindh, Balochistan and North West Frontier Post. Furthermore, the questionnaires were distributed to depositors who were specifically linked with different Islamic banks of Pakistan.

In fact, a paper-based survey is time saving and if face-to-face appointments are made then the accuracy of the data collected is increased. Therefore, the researcher had appointments with different Islamic bankers for survey forms completion. The banker's preferred face-to-face interactions because they were of the point of view that with such a busy schedule they would only be able to spare time for such productive tasks and applications if the researcher came to them.

To collect the data from Islamic bankers the researcher briefed the bankers regarding the study by telephone call. Afterwards, the researcher met with the Islamic bankers and after establishing an understanding of the study, and questionnaire, he collected data from the bankers.

3.5.4 Merits and demerits of data collection through questionnaires

There are some merits as well as some demerits of data collection through questionnaires. The merits of survey through questionnaire are:

- i. Through questionnaires, bulk data are collected in less time. The administration of questionnaire data is also easy and less time consuming.
- ii. If a large population needs to be addressed then a questionnaire will furnish facilitation. A sample is selected from the whole population and information is collected from them through closed-ended, structured questionnaires.
- iii. In Pakistan, a questionnaire-based survey is considered flexible and easy to understand because people generally know about questionnaires in the context of research and finding a solution to a problem.
- iv. A questionnaire is easily analyzed and results can be drawn for a specified sample size (i.e. selected community that is a part of a large population).

The demerits of survey through questionnaire are:

- i. A questionnaire is often closed ended so the respondents cannot express their feelings or point of view for a certain variable specified for the study.
- ii. A questionnaire should be of reasonable length. If a questionnaire becomes very long then the respondent loses focus. If the questionnaire is short then it is possible that an analysis will not show accurate results.

3.5.5 Pilot study

Pilot studies represent a fundamental phase of the research process. The purpose of conducting a pilot study is to examine the feasibility of an approach that is intended to be used in a larger scale

study. The roles and limitations of pilot studies are described here using a clinical trial as an example. A pilot study can be used to evaluate the feasibility of recruitment, randomization, retention, assessment procedures, new methods, and implementation of the novel intervention (Leona *et al.*, 2011). Many difficulties can be avoided by having a pilot study (Altman, 2002). Bryman and Bell (2003) discussed some uses of pilot studies in research. They, for example, include:

- i. Pilot study is employed to develop the questionnaire. The open ended and closed ended questions are asked to review the answers.
- ii. In a pilot study the researcher can evaluate the questions and their relevance in accordance with the objectives of the study.
- iii. The pilot study facilitates that the pilot data collected through questionnaire are reliable. An analysis can also be made and such analysis suggests the reliability and validity of the results from that data.
- iv. The flow of questions and validity of content can be checked through a pilot study.
- v. The interview guide can be tested in a pilot study. In a pilot study the sequence of interview questions can be observed and relevancy of the questions can also be determined. How the respondents are responding can also be judged.

For most questionnaires, the minimum number of a pilot study is 10 to 30 (Saunders *et al.*, 2003). Therefore the researcher distributed 30 questionnaires at random in Islamic banks (i.e. depositors and bankers). The respondents answered the questions satisfactorily and no noticeable problem was identified.

3.5.5.1 Reliability of questionnaire from pilot study

Reliability is the technique in which the same results are arrived at if repeated data is measured for different conditions (Verdoorn & Ferber, 1962). Therefore a series of attitudinal questions on the desirability of resale price maintenance would be adjudged reliable if the repetition of the test under the same conditions produces the same attitude. Bryman and Bell (2003) suggested that reliability refers to the consistency of a measure of a concept. It is fundamentally concerned with the question of whether the results of a study are repeatable. Dominowski (1980) found that reliability refers to the degree to which a measure is correlated with itself.

The commonly used test for confirmation of internal reliability is called Cronbach alpha. Due to this test it is determined that how the variables are correlated with each other. “Cronbach’s alpha is computed in terms of the average inter-correlations among the items measuring the concept” (Sekaran, 2003). The values of alpha fluctuate from 0 to 1. If the value calculated is 1 then the construct is considered perfectly internally reliable and if the value arrived at is 0 then the constructs are considered to have no internal reliability. According to Bryman and Bell (2003), an acceptable value of alpha should be 0.80 or near about it. Some researchers portrayed that a 0.70 value of alpha is also acceptable (Pallant, 2010).

Tables 3.1 and 3.2 show the reliability statistics of the questionnaires relating to Islamic bankers and Islamic depositors respectively, Cronbach’s alpha of Islamic bankers’ questionnaire is 0.890 and of Islamic depositors is 0.893 which suggests very good internal consistency for the scale with this specific sample.

Table 3.2 Reliability statistics of questionnaire of Islamic bankers

Cronbach's alpha	Number of elements
0.890	19

Table 3.3 Reliability statistics of questionnaire of depositors to Islamic banks

Cronbach's alpha	Number of elements
0.893	23

3.5.5.2 Validity of instruments (face and expert validity)

Validity is considered a remarkably significant criterion in the research and analysis of results. “Validity refers to the issue of whether an indicator or a set of indicators that is devised to gauge a concept really measures that concept; that is to say validity is concerned with the integrity of the conclusions that are generated from a piece of research” (Bryman and Bell, 2003).

The validity of instruments and research results is considered significant but there are different approaches for confirmation of validity of the instruments (Ferber and Verdoorn, 1962). The researcher in this study has taken the criterion of face and expert validity for the instrument. The researcher discussed the wider implications of this study with a number of experts in risk management. The discourse boiled down to the fact that the study is of paramount importance.

3.6. Secondary Data Analysis

Panel data econometrics

Study at hand is based on panel data, since panel data relate to individual, states, countries, companies etc., over the time. Panel data permits you to control variables that cannot be observe

such as, variables that change over the time but not across the entities, cultural factors or differences in business policies across companies. Panel data allows you to include variables in analysis in different level like student, school, states etc. Panel data gives more other advantages such as less multicollinearity, more degree of freedom, more variability and more informative data (Gujarati, 2009). Panel data consists of states, individual or countries which are heterogeneous while time series or cross-section studies not control such kind of heterogeneity and probably get biased results (Moulton, 1986). Hence to cure heterogeneity panel data is best device.

It is much important to choose appropriate panel data regression model. Efficiency and consistency of calculated intercepts and coefficients depend on appropriate panel data regression model. The first step in panel data regression is to choose between random and fixed effects model. Following explanation of random and fixed effects model will help in selection appropriate regression model. Present study employed fixed effects as well as random effects model.

Fixed effects Model

Fixed effects model can be define by following equation.

$$Y_{it} = \beta_i X_{it} + \alpha_i + u_{it} \quad eq.1$$

Y_{it} Representing dependent variable where i denotes to entity and t time, X_{it} is dependent variable and β_i indicating coefficients of that independent variable. α_i Demonstrating unknown intercept for each country included in analysis. Finally u_{it} is representing error term. There are different properties or characteristics of fixed effects model .Fixed effect model perform well when model include variables that vary over time. Fixed effect model examine relationship within an entity i.e., person, firm or country, it's important to note here that each entity have its particular characteristics which may or may not affects dependent variable. For example business internal policies may have effects on its stock prices, the influence of gender being male or female may effects on specific decision or political system of a country may affect its GDP etc.

Rationale behind using fixed effects model is that we assume that there is something in individual character which making biased outcome of dependent variable as above mentioned in example gender may influence political system etc.; hence in fixed effect model we control such kind of heterogeneity and fixed effects model remove time invariant and estimation get net effect of the independent variables on dependent variables. Furthermore, all time invariant characteristics of individuals should not be correlated with the individual characteristics of other entities. Each entity is different from other entity hence error term and constant must not be correlate with other entity error term and constant. If the error term and constant correlate with other, in this case fixed effect model will not be suitable. Further in fixed effect model we assumed that intercept will vary over time but remain same in each entity (Brooks, 2014; Gujarati, 2009). Fixed effects model perform well when we focus on a specific set of cross-sections and our inferences is restricted for that specific cross sections (Baltagi, 2008).

Random Effects Model

On the other hand, random effects model assume that variance among different entities is random and uncorrelated with the independent variables proposed in the model. Random effects model can be explain by considering following equation.

$$Y_{it} = a + \beta X_{it} + \omega_{it}, \quad \omega_{it} = \epsilon_i + v_{it} \quad eq.2$$

Where X_{it} a $1 \times k$ vector of explanatory variables, here we don't have dummy variables unlike in fixed effect model, dummy variable we include capturing the variation of cross-sectional dimensions. Now in random effects model heterogeneity which occur across the cross-sectional dimensions will be capture through ϵ_i . Further for each new cross-sectional error term ϵ_i mean should be zero, should be independent from individual observations error term v_i and finally should constant variance σ_ϵ^2 and independent from independent variables βX_{it} (Brooks, 2014). While there is one another property of random effects model that random effects model allow intercept to vary in each entity but same over time (Brooks, 2014). Random effects model used when we believe that there is influence of difference across entities on dependent variable. Furthermore there is an advantage of random effects model that we can include time invariant variable in model i.e., gender. While in fixed effect model we capture impact of time invariant

through intercept. Further, random effects model is appropriate when firms included in sample set are drawn randomly from large population (Baltagi, 2005).

Random effects VS fixed effects Model

- When cross-sections are large and time is small random effects model is preferable $N > T$.
- If ϵ_i error term and independent variables are correlated then fixed effects model may be appropriate.
- If cross-section selected in model are selected randomly from population then random effect model is appropriate. But if entity selected for the model are representing entire population then fixed effect model is appropriate.
- Random effects model is only valid if error term ω_{it} uncorrelated with all independent variables.
- Finally more appropriate approach to decide between random or fixed effects model Hausman test can be applied (Brooks, 2014; Gujarati, 2009; Hausman, 1978; Moulton, 1987).

Model specification

All three models can be defined as following:

Model 1: Asset Model

$$PDF = f(RPA, DFR, NOP, CO)$$

$$PDF_{it} = \beta_0 + \beta_1(RPA_{it}) + \beta_2(DFR_{it}) + \beta_3(NOP_{it}) + \beta_4(CO_{it}) + \mu_{it}$$

Model 2: Liability Model

$$SD = f(RPA, DFR, CO, LSD)$$

$$SD_{it} = \beta_0 + \beta_1(RAP_{it}) + \beta_2(DFR_{it}) + \beta_3(CO_{it}) + \beta_4(LSD_{it}) + \mu_{it}$$

Model 3: Liquidity Reserve Model

$$TLR = f(PDF, DFR, \%RS, LTRL)$$

$$TLR_{it} = \beta_0 + \beta_1(PDF_{it}) + \beta_2(DFR_{it}) + \beta_3(\%RS_{it}) + \beta_4(LTRL_{it}) + \mu_{it}$$

Whereas:

PDF= Investments in operational financing

RPA=Return sharing paid to depositors

DFR= Income from operational financing

NOP= Profit from non-operational financing

CO= Cost of banking operations

SD= Islamic deposits

LTID= Lag of total Islamic deposits

TLR= Total liquidity reserve

%RS=% of revenue sharing on deposits

LTRL= Total liquidity reserve

$\beta_1, \beta_2, \beta_3, \beta_4$ = Slope of coefficients

β_0 =Constant

μ = error term

ln =Natural logarithmic

There are various models of banking behavior in economic literature. Amongst all, there are four alternative references which suit the purpose of this research. These are the models of: Diamond (2007), Diamond and Dybvig (2000), Gatev et al. (2005), and Freixas and Rochet (1999). This model is adapted from Ismal (2010) .

Hausman test

In 1978 Hausman developed a test which is known as Hausman test, the prime objective of this test was to select between random effects or fixed effects model. Hausman test have null hypothesis which is random effects model is appropriate. If probability value comes more than 5% in this case we apply random effects model. On the other side if probability value comes less than 5% we apply fixed effects model (Hausman, 1978).

Diagnostic tests

Durbin- Watson Statistics:

Durbin-Watson value is used to check serial autocorrelation in errors from regression analysis. Durbin- Watson Statistics has null hypothesis no serial correlation .The value of D-W fall in

range of 0-4 , if values exist near 2, this indicates that there is no autocorrelation , while values near 0 represent positive autocorrelation (Gujarati, 2009). There are different ways to test serial correlation in panel data like Wooldridge test for autocorrelation and Durbin-Watson statistics, present study employed DW value for serial correlation because of I have used EViews 9 software which doesn't have Wooldridge test for autocorrelation.

Correlation test

A regression must be free from multicollinearity, multicollinearity is a state when explanatory variables correlate with each other and in the presence of multicollinearity results become biased. Hence multicollinearity is not desirable, to check either model is suffering from multicollinearity or not different methods can be applied, first method, Chatterjee and Price (1991) claimed if value of variance inflation factor (VIF) comes more than 10, it is evidence that there is multicollinearity problem. Secondly, if the pair wise correlation between 2 Regressors increases more than .8, it is rule of thumb that, this state shows multicollinearity (Ahmet. B, 2010). Study at hand, followed second thought and detected multicollinearity problem through pair wise correlation.

Cross dependence test

Present study employed cross-dependence test to know either cross-dependency exists or not in errors. Literature on panel data modeling showed panel data models suffer from cross sectional dependence which is not desirable. Phillips and Sul (2003) opined if there is cross-section dependence in data, and if it is ignored (usually researcher do it) in this case chances to be biased of estimators increases. We have different three kinds of cross dependence test which have different properties, like if we have $T > N$ in this case appropriate test is the Lagrange Multiplier

(LM) test, established by Breusch and Pagan (1980), which is available in stata as well as in eviews with null hypothesis, there is no cross-section dependence.

Chapter 4

Secondary Data Analysis for Liquidity Models

Chapter four of the research thesis provides analysis of the quantitative data collected to test three liquidity models. The first model provides insight into the liquidity behavior of the depositors: liability model. The second model investigates the liquidity behavior of Islamic banks: asset model. The third model tries to establish the determinants of liquidity reserves in Islamic banks: liquidity reserve model. The estimation of this part is conducted using E-Views and panel estimation technique using random and fixed effect modeling is applied on this data in order to assess liquidity dynamics of Islamic banks in Pakistan. An econometric analysis of this data is provided.

4.1 Dynamics of Liquidity of Islamic banks in Pakistan: An Econometric Analysis

This part of the analysis provides results relating to the econometric analysis of three liquidity models estimated in order to assess dynamics of liquidity from asset point of view, from liability point of view and from liquidity reserve point of view. The analysis of the chapter is preceded as follows:

First sub section of the analysis provides estimation results of the asset model which provides descriptive analysis for the variables included in the study and after that panel estimation using random and fixed effect is provided and in the end Hausmen specification test is provided in order to test which estimation model yielded better results. Second sub section provides estimation results of the liability model in the manner entailed previous and third sub section

provides the estimation results on the determination of the liquidity reserve in manner consistent to other estimations of asset and liquidity models.

4.1.1 Estimating asset model

First model estimated was asset model, which focuses on the asset side of liquidity management. Dependent variable of the model is investment in operational financing (PDF)_m while independent variable are return sharing paid to depositors (RPA), income from operational financing (DFR)_m profit from non operational financing (NOP) and Islamic deposits (CO). This part of analysis is segregated into two parts whereby first part provides descriptive statistics of the variables included in the model and second part provides estimation results using random and fixed effect modeling.

4.1.1.1 Descriptive: Asset Model

This part of analysis provides descriptive statistics of the variables included in the model. Variable included in the model are investments in operational financing (PDF), return sharing paid to depositors (RPA), income from operational financing (DFR), profit from non-operational financing (NOP) and cost of banking operations (CO).

Table 4.1.1.1 provides the descriptive of the asset model of the study where Mean of the investments in operational financing (PDF) is 16.49 along with a standard deviation of 1.4097 and minimum and maximum values 12.096 and 18.98. The positive maximum value of PDF indicate that banks are increasing investment in operation financing activities but after comparing minimum values with average value it is clear that there are few companies which showing less investments in financing activities.

Second variable of the model is return sharing paid to depositor, which is independent variable, this variable yielded a mean value of 13.68 along with standard deviation 1.86 and minimum and maximum values 9.03 and 17.02. It is clear that there are few banks that are paying higher profit to their depositor but on their other hand minimum value for RPA display that there few banks are giving less return to their depositor.

Other independent variable of the model is income from operational financing (DFR) which yielded a mean value of 14.42 along with a standard deviation of 1.74 and minimum and maximum values 11.15 and 17.71 respectively. Maximum value showing that banks are earning positive return from investments in operation financing, but minimum value demonstrating that all banks are not equally earning same profit even all banks are earning positive return but not heavy return .

Profit from non-operational financing (NOP) is third variable of the study which yielded a mean value of 9.43 and its standard deviation 3.62 and minimum and maximum values 0.000000 and 13.75 correspondingly. Profit from non-financial activities is not so high there are few banks which earning zero profit from non-financial financing, limited banks earn normal profit.

Last independent variable of the study is cost of banking operations (CO) having mean value 13.84 with standard deviation 1.23 minimum and maximum values 11.63 and 16.19 correspondingly. Average value of cost of banking operating indicating that banks are bearing normal cost of operating but there are few banks which are bearing very nominal cost for their operations.

Skewness values indicating that all variables lnPDF, lnRPA, lnDFR, lnNOP, and lnCO are left skewed. Kurtosis statistic showing that lnDFR and lnCO variables are *platykurtic* (Uniform distribution) while lnPDF, lnRPA and lnNOP are *leptokurtic* (having long tail / higher peak). Jarque–Bera statistics showing that lnPDF and lnNOP variables have significant probability values which is showing that residuals are not normally distributed. Even residual are not normally distributed we still can accept model as many researchers accept model even residuals were not normally distributed (Chaudhry, Safdar, & Farooq, 2012; Mohi-u-Din & Mubasher, 2013). While lnRPA, lnDFR, and lnCO variables have insignificant probability values which is showing that residuals are normally distributed.

Table 4.1.1.1 Descriptive Statistics: Asset Model

	lnPDF	lnRPA	lnDFR	lnNOP	lnCO
Mean	16.492	13.683	14.426	9.431	13.844
Median	16.817	14.129	14.603	10.335	14.033
Maximum	18.984	17.023	17.715	13.753	16.191
Minimum	12.096	9.034	11.152	0.000	11.631
Std. Dev.	1.410	1.870	1.744	3.626	1.231
Skewness	-2.927	-0.753	-0.073	-1.515	-0.181
Kurtosis	4.256	3.327	2.071	4.446	2.089
Jarque-Bera	7.742	3.662	1.363	17.379	1.480
Probability	0.021	0.160	0.506	0.000	0.477

4.1.1.2 Estimation of model: Asset Model

Second section of analysis provides estimation of the asset model, whereby estimation is made on the basis of fixed effect and random effect model. Dependent variable of the model is investment in operational financing (PDF) and independent variables of the model are return sharing paid to depositors (RPA), income from operational financing (DFR), profit from non-operational financing (NOP) and cost of banking operations (CO).

Adjusted R-squared of the model is 0.62 which is quite good and indicates that 62 % of the variation in investment in operational financing (PDF), F-Statistics of the model is 8.3334 which indicates that estimation model is good fit at 1% level of significance.

Table 4.1.1.2.1& 4.1.1.2.2 Fixed effects and random effects model estimation: Asset Model

Variable	Fixed effects model 4.1.1.2.1	Random effects model 4.1.1.2.2
Constant	8.6726 [1.8882] (0.001)	7.8415 [1.5227] (0.0000)
lnRPA	0.5092 [0.1520] (0.0023)	0.3914 [0.1432] (0.0101)
lnDFR	0.2621 [0.1639] (0.1328)	0.2524 [0.1687] (0.1446)
lnNOP	0.0668 [0.0718] (0.3604)	0.0863 [0.0519] (0.1060)
lnCO	-0.2572 [0.1993] (0.2076)	-0.08310 [0.0198] (0.6761)
R-squared	0.7042	0.5936
Adjusted R-squared	0.6222	0.5427
F-statistic	8.3334	11.6829
Prob. (F-statistic)	0.0000	0.0000
Note: Standard errors in [] & probability in ()		

First independent variable of the model was return sharing paid to depositor (RPA), which yielded beta co-efficient of 0.5092 probability value is 0.0023, which indicates the positive impact of RPA on investment in operational financing is significant. Second independent variable of income from operational financing yielded a positive beta coefficient of 0.2621 along with a probability value of 0.1328 implying that this relationship is also insignificant. Third variable of the model i.e. profit from non-operational financing (NOP) provided a beta coefficient of 0.0668 and probability value of variable is 0.3604, implying that the impact of

profit from non-operational financing is also insignificant. Lastly, variable of cost of banking operations (CO) yielded a beta coefficient of -0.2572 along with a probability value of 0.2076, implying that impact of cost of operations on investments in operational financing is insignificant at 5% level of significance.

Although R-square of the model is quite good only variable return sharing paid to depositors (RPA), was found to have a significant and positive impact on investment in operational financing. Higher R-square of the model implies that there exist cross sectional implications of the asset side of liquidity management. Each cross section has unique approach and capabilities with regard to management of investment in operational financing.

Table 4.1.1.2.2 provides random effect model estimation for the asset model. R-square of the model is 0.59, which is good and indicates that 59% of variation in the dependent variable is predicted by the model. The F-statistics value of the model is 11.6829 that imply that estimation model is good fit at 1 % level of significance.

First independent variable of the model is return sharing paid to depositors (RPA), which yielded a positive impact on the investment in operational financing. The relationship is depicted by beta coefficient of 0.3914. Probability value of the relationship is 0.0101, which indicates that impact of return sharing paid to depositors has a positive and significant impact on investment in operational financing. The coefficient value indicating that due to 1% increase in lnRPA leads over increase 39% in investment in operational financing. Second variable independent is income from operational financing (DFR), which yielded a beta coefficient of 0.2524 along with

probability value of 0.1446 implying that the impact of profit from operational, financing on investment in operational financing, is insignificant. Third independent variable of the model is profit from non-operational financing (NOP) provided beta coefficient of 0.0863 along with a probability of .1060 which implies that impact of profit from non-operational financing has an insignificant impact on investment in operating financing. Lastly, cost of banking operations (CO) also showed a positive beta of -0.0831 along with probability value of 0.6761 implying that impact of cost of banking operations on investment in operational finances is insignificant.

Overall, random effect estimation entailed that all the variables except return sharing paid to depositors (RPA), have insignificant relationship with investment in operational financing.

Table 4.1.1.2.3 provides results of Hausman specification test in order to choose better estimation model from random effect and fixed effect model. Probability value of 0.7727 indicates that there exist significant differences between beta coefficients estimated in random effect model and fixed effect model, which implies that random effect model is better estimation choice. This also indicates that cross sectional characteristics are important consideration in liquidity management of the Islamic banks and every bank has certain unique mechanism to manage its liquidity from investment perspective.

Table 4.1.1.2.3 Hausman Specification Test: Asset Model

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Probability.	Decision
Cross-section random	1.798858	4	0.7727	Random effects model

Overall, there is an indication of a positive and significant impact of variable of return sharing paid to depositors, profit from non-operational finances and cost of banking operations on investments in operational financing. Main consideration of investment is the availability of funds, which are related to the deposits. Thus, more the bank would pay return sharing to the depositors more deposits would come to Islamic banks and banker would be able to maintain investments in the operational financings. Same is the case with the profit from non-operational financing, which is the main source of return sharing with the investors. More the non-operational profits of the bank, more would be its inclination to invest in operational financing yielding less returns as more profitability makes a bank more secure and it could opt for a better liquidity management strategy. Lastly, cost of banking operations also yielded a positive impact on the investments in operational financing implying that higher costs lead towards better liquidity management in Islamic banks.

Diagnostic tests

Table 4.1.1.2.4 Pearson's correlation coefficient matrix

Correlation (Probability)	lnPDF	lnRPA	lnDFR	lnNOP	lnCO
lnPDF	1.000000				
lnRPA	0.674386*	1.000000			
lnDFR	0.706189*	0.712953*	1.000000		
lnNOP	0.278786**	-0.062793	0.315054**	1.000000	
lnCO	0.548788*	0.748502*	0.650300*	0.131631	1.000000
Note: * indicates significance at 5% level of significance					
** indicates significance at 10% level of significance					

Table 4.1.1.2.4 presenting Correlation coefficient matrix, Correlation coefficients tell about the relationship strength, correlation coefficients show change in a variable due to change in other

variable (Kohler, 1994). Further correlation coefficients matrix also indicate about the presence of multicollinearity in model. A rule of thumb if correlation coefficients value comes more .8, this indicate presence of multicollinearity. Multicollinearity influence a regression model hence, to have unbiased outcome model must be free from multicollinearity. Above correlation coefficients matrix showing finding for the asset model and no one coefficients is more .8, hence we can conclude that there is no multicollinearity problem in model and we can rely on outputs.

Table 4.1.1.2.5 **Serial correlation**

Null hypothesis: No serial correlation

Test	Fixed effects Model	Random effects Model
Durbin-Watson Statistics	2.25	2.20

It is an assumption for regression model that it should be free from serial correlation, when residual of current year depend on residual of previous year this state indicated serial correlation. Study at hand, employed Durbin Watson statistics to know either serial correlation exist or not. It is rule of thumb that Durbin Watson statistics value should be in between 2-4 and near 2 DW value indicate negative serial correlation while DW value near to 0 indicate positive serial correlation. Durbin Watson statistics for the current study 2.25 and 2.20 for the fixed and random effects model respectively indicating negative serial correlation, hence we can conclude that model is free from serial correlation and we can rely on finding of Asset model.

Table 4.1.1.2.6 **Residual Cross-Section Dependence Test**

Null hypothesis: No cross-section dependence (correlation) in residuals

Test	Statistic	d.f.	Prob.
Lagrange Multiplier (LM)	-0.2692	4	0.7877

Phillips & Sul (2003) opined if there is cross-section dependence in data, and if it is ignored (usually researcher do it) in this case chances to be biased of estimators increases. We have different three kinds of cross dependence tests (Breusch Pagan Lm , Lagrange Multiplier (LM) test and Pesaran CD), which have different properties, like if we have $T > N$ in this case appropriate test is the Lagrange Multiplier (LM) test, established by Breusch & Pagan (1980). Null hypothesis for cross-dependence test is no cross-section dependence in residuals. Finding of the cross dependence test showing probability value 0.7877, which is greater than 5%, hence we shall accept null hypothesis of no cross-section dependence, which is desirable. Now we can rely on results of asset model.

4.1.2 Estimating Liability Model

Second model estimated in the study is liquidity model, which assumes that banks try to manage their liabilities in a better manner for better liquidity management. Liability model assumes that deposits are the main thing in the quest to manage the liquidity and more the deposits a bank would have more it would be liquid. The bank specifies Islamic deposits (SD) as dependent variable and variable of return sharing paid to depositors (RPA), income from operational financing (DFR), cost of banking operations (CD) and lag of total Islamic deposits (LSD) are considered as independent variables. This part of analysis is also segregated into two parts whereby first part of analysis would discuss descriptive analysis and second part of analysis would provide model estimation using random and fixed effect modeling.

4.1.2.1 Descriptive: Liability Model

This part of the analysis provides descriptive statistics for the liability model which takes Islamic or Shariah deposits (SD) as dependent variable, while variables of return paid to depositors

(RPA), income from operational financing (DFR), cost of banking operations (CO) and lag of Islamic deposits (LSD) are taken as independent variables. Table 4.1.2.1 provides descriptive statistics of the variables included in the liability model.

Table 4.1.2.1 Descriptive: Liability model

	lnSD	lnRPA	lnDFR	lnCO	lnLSD
Mean	17.262	13.743	14.424	13.934	16.941
Median	17.427	14.168	14.746	14.329	17.147
Maximum	19.757	17.023	17.715	16.191	19.485
Minimum	14.391	9.034	11.109	11.631	11.951
Std. Dev.	1.211	1.806	1.719	1.166	1.391
Skewness	-0.408	-0.809	-0.266	-0.405	-1.142
Kurtosis	3.060	3.296	2.255	2.284	5.427
Jarque-Bera	1.336	5.300	1.678	2.336	19.902
Probability	0.513	0.071	0.432	0.311	0.000

An Islamic deposit (SD) is dependent variable of the model, which yielded a mean value of 17.26 along with a standard deviation of 1.21 and minimum and maximum values 14.39 and 19.75. Islamic deposit maximum value indicating that there is increasing trend of Islamic deposit, different banks having very high frequency of Islamic deposit. On the other hand, there are few banks which have low frequency of Islamic deposits.

Second variable of the model is return sharing paid to depositor, which is independent variable, this variable yielded a mean value of 13.74 along with standard deviation 1.80 and minimum and maximum values 9.03 and 17.02. It is clear that there are few banks, which are paying higher profit to their depositors, but on their other hand minimum value for RPA display that there few banks are giving less return to their depositor.

Other independent variable of the model is income from operational financing (DFR) which yielded a mean value of 14.42 along with a standard deviation of 1.71 and minimum and

maximum values 11.10 and 17.71 respectively. Maximum value showing that banks are earning positive return from investments in operation financing, but minimum value demonstrating that all banks are not equally earning same profit even all banks are earning positive return but not heavy return .

Another independent variable of the study is cost of banking operations (CO) having mean value 13.93 with standard deviation 1.16 minimum and maximum values 11.63 and 16.19 correspondingly. Average value of cost of banking operating indicating that banks are bearing normal cost of banking operation but there are few banks which are bearing very minimal cost for their operations.

Last independent variable of the study is lag of total Islamic deposits, which yielded a mean average of 16.94 along with standard deviation of 1.39 with minimum and maximum values of 11.63 and 16.19 respectively. Minimum value of lag of total Islamic deposits showing that there are few banks which have minor deposit which is delay by depositor, while few banks have large amount as is lag of total Islamic deposits.

Skewness values indicating that all variables $\ln SD$, $\ln RPA$, $\ln DFR$, $\ln CO$, and $\ln LSD$ are left skewed. Kurtosis statistic showing that the variables $\ln DFR$ and $\ln CO$ are platykurtic (uniform distribution), while, $\ln SD$, $\ln RPA$ and $\ln LTID$ variables are leptokurtic. Jarque–Bera statistics showing that all variables except $\ln LSD$ have insignificant probability values which is showing that residuals are normally distributed. Even residual are not normally distributed we still can

accept model as many researchers accept model even residuals were not normally distributed (Chaudhry *et al.*, 2012; Mohi-u-Din & Mubasher, 2013).

4.1.2.2 Model estimation: Liability model

This part of analysis provides estimation results of liability model where Islamic deposit (SD) is considered as dependent variable and return sharing paid to depositors (RPA), income from operational financing (DFR), cost of banking operations (CO) and lag of Islamic deposits (LSD) are considered as independent variables.

Table 4.1.2.2.1 is demonstrating results of fixed effects model, output showing that adjusted R-square of the model is 0.73, which implies that explanatory power of the model is good, and almost 73% variation in Islamic deposits is predicted by variables included in the model. Further, F-statistics of the model 15.49, which indicates the model estimated is good fit at 1% level of significance.

First independent variable of the study, return sharing paid to depositors (RPA) yielded a beta coefficient of 0.2654 along with probability value 0.0006 implying that impact of return sharing paid to depositors on Islamic deposits is significant. A 1% increase in lnRPA increases the Islamic deposit (SD) by 26%. Second independent variable of the model is income from operational financing (DFR) which yielded beta coefficient of 0.2848 along with a probability value of 0.1542 implying that this relationship is also insignificant. Third variable of the study is cost of operations (CO), which yielded a beta coefficient of -0.0029 (prob. = 0.9788). This relationship is also insignificant. Lastly, variable of lag of Islamic deposits yielded a positive

impact on Islamic deposits. The beta coefficient for this relation is 0.1035 and probability value is 0.023 indicating that impact of lag of Islamic deposits on Islamic deposits is significant at 5% level of significance. A 1% increase in lnLSD increases Islamic deposit (SD) by 2.3%.

Fixed effect model estimation only yielded two significant relationships that are between the variable of Islamic deposits and its lag and return sharing paid to depositors (RPA). All other variables included in the model were found insignificant with regard to their impact on Islamic deposits.

Table 4.1.2.2.1&4.1.2.2.2 Fixed effects and Random effects estimation: Liability Model

Variables	Fixed effects model 4.1.2.2.1	Random effects model 4.1.2.2.2
Constant	7.8763 [1.1871] (0.0000)	7.7341 [1.1719] (0.0000)
lnRPA	0.2654 [0.0695] (0.0006)	0.2603 [0.0682] (0.0005)
lnDFR	0.2848 [0.0642] (0.1542)	0.2841 [0.0617] (0.6029)
lnCO	-0.0029 [0.1089] (0.9788)	-0.0089 [0.1067] (0.9333)
lnLSD	0.1035 [0.0846] (0.023)	0.1193 [0.0825] (0.0156)
R-squared	0.7897	0.7151
Adjusted R-squared	0.7387	0.6843
F-statistic	15.4942	23.2245
Prob. (F-statistic)	0.0000	0.0000
Durbin-Watson stat	2.2840	2.5956
Note: Standard errors in [] & probability in ()		

Table 4.1.2.2.2 provides random effect estimation of the liability model. Overall, r-square of the model is 0.71 that indicates that model has good explanatory power and the estimated model causes almost 71% of the variation in the Islamic deposits. F-statistics of the model is 23.22, which also indicate that model estimation is good fit at 1% level of significance.

First independent variable of the study is return sharing paid to depositors (RPA), which was found to have a positive (beta coefficient = 0.2603) and significant (prob. 0.0005) impact on the Islamic deposits and this relationship was significant at 1% level of significance. It suggests that a 1% increase in lnRPA leads over 26% increase in Islamic deposit (SD). Second independent variable of model is income from Operating finances (DFR) which yielded a beta coefficient of 0.2841 along with a t-statistics of 0.6029 implying that the impact of income from operating finances on Islamic deposits is insignificant. Third variable of cost of banking operations (CO) was found to have a beta coefficient of -0.0089 along with a probability value of 0.9333, which implies that the relationship is insignificant. Lastly, lag of Islamic deposits was found to have a positive (beta coefficient = 0.1193) and significant (prob. = 0.0156) impact on Islamic finance. This indicates 1% rise in lnLSD increases 11% in Islamic deposit (SD).

Overall, it was found that return sharing paid to deposit has a positive and significant impact on Islamic deposits while this impact was also positive and significant for income from operational financing and lag of Islamic deposits.

Table 4.1.2.2.3 Hausman Specification test: Liability Model

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Probability.	Decision
Cross-section random	0.837268	4	0.425	Random effects model

Table 4.1.2.2.3 provides Hausman specification test results in order to choose better estimation model between random effect estimation and fixed effect estimation. The probability value of Chi-Sq. Statistic is 0.425 that implies that there is significant differences existed between beta coefficient calculated under random effect estimation and fixed effect estimation. Thus, random effect modeling yields better estimation results.

Overall, two variables return sharing paid to depositors and lag of Islamic deposits have a positive and significant impact on the Islamic deposits in the Islamic banking sector of Pakistan. This implies that larger banks having more deposit would attract more Islamic deposits and thus, liquidity of such banks would be better.

Diagnostic tests for Liability model

Table 4.1.2.2.4 Pearson's correlation coefficient matrix for Multicollenearity

Correlation Probability	lnSD	lnRPA	lnDFR	lnCO	lnLTID
lnSD	1.000000				
lnRPA	0.650663*	1.000000			
lnDFR	0.679185*	0.381401*	1.000000		
lnCO	0.509277*	0.498212*	0.421761*	1.000000	
lnLTID	0.593801*	0.559168*	0.362888*	0.672262*	1.000000

*** indicates significance at 5% level of significance**

Pearson's correlation coefficients are all less than .8, which is evidence that there is no multicollenearity issue. Multicollenearity is basic assumption of regression model, because of presence of multicollenearity in model increase standard error and results become biased. Therefore, on the base of liability Pearson's correlation matrix we can conclude that liability model is free from multicollenearity and we can rely on result.

Table 4.1.2.2.5 Serial correlation

Null hypothesis: No serial correlation

Test	Fixed effects Model	Random effects Model
Durbin-Watson Statistics	2.28	2.59

Table 4.1.2.2.5 representing serial correlation output, serial correlation leads to underestimated standard errors, due to serial correlation, T-statistics are overstated and chances of type 1 error also increases. Therefore in the presence of serial correlation estimated results become biased. Present study employed Durbin-Watson statistics to conform either model suffering from serial correlation or not. Durbin-Watson values for both fixed effects and random effects model 2.28 and 2.59 rejecting alternative hypothesis of there is serial correlation, and now we can conclude that reliability model is free from serial correlation and estimated results are unbiased.

Table 4.1.2.2.6 Residual Cross-Section Dependence Test

Null hypothesis: No cross-section dependence in residuals

Test	Statistic	d.f.	Prob.
Lagrange Multiplier (LM)	-0.354939	4	0.3061

Cross-section dependence in residuals make estimated results biased, present study employed Lagrange Multiplier test to conform cross-section dependence test. The Null hypothesis for cross-section dependence is, there is no cross-dependence among residuals .The probability is more than 5%, whenever we find probability value more than 5%, we accept null hypothesis, which is evidence that there is no cross-dependence among residuals and we can conclude that model is free from cross-dependence and results are unbiased and reliable.

4.1.3 Estimating liquidity reserve model

Third model of the liquidity management is related to the estimation of liquidity reserves. The model considered total liquidity reserve as dependent variable and variables of total investment in all financing, total profit from operational financing, % of revenue sharing on deposits and lag of total liquidity reserve as independent variables. This part of estimation is also segregated into two parts whereby first part provides descriptive analysis and second part provides estimation results using random and fixed effect modeling.

4.1.3.1 Descriptive: Liquidity Reserve Model

This part of analysis provides descriptive analysis of the variables included in the liquidity reserve model. Dependent variable of the model is total liquidity reserve (TLR) which is estimated using independent variables of total investments in all financing, total profit from operational financing (PDF), % of revenue sharing on deposits (%RS) and lag of total liquidity reserve (LTLR). Mean value of total liquidity reserve (TLR) is 14.26 along with a standard deviation of 1.21. First independent variable of the study is investment in financing (PDF) which yielded mean of the investments in operational financing (PDF) is 16.54 along with a standard deviation of 1.30 and minimum and maximum values 12.09 and 18.96. The positive maximum value of PDF indicate that banks are increasing investment in operation financing activities but after comparing minimum values with average value it is clear that there are few banks which showing less investments in financing activities.

Other independent variable of the model is income from operational financing (DFR) which yielded a mean value of 14.42 along with a standard deviation of 1.71 and minimum and maximum values 11.10 and 17.71 respectively. Maximum value showing that banks are earning

positive return from investments in operation financing, but minimum value demonstrating that all banks are not equally earning same profit even all banks are earning positive return but not heavy return.

Third independent variable of the model is % of revenue sharing on deposits with means values of 5.07 and minimum and maximum values 1.04 and 9.59 respectively. Maximum value for the Islamic depositor showing that banks few banks providing highest rate of profit 9.59 % to their depositors to encourage their investment but on the other hand, it is also important to note that according to minimum value of % of revenue sharing on deposit few banks are not paying minimal return to return to their depositors

Last independent variable of the model is lag of total liquidity reserve with provided mean value of 14.038 along with a standard deviation of 1.16 and minimum and maximum values 11.39 and 16.48 respectively. Minimum value presenting that few banks have very small amount of lag of total liquidity reserve for the uncertainty and payments to their customer, while rest of banks have normal among of lag of total liquidity reserve for the uncertainty and payments to their customer.

Skewness values indicating that all variables $\ln\text{TRL}$, $\ln\text{PDF}$, $\ln\text{DFR}$, $\%\text{RS}$ and $\ln\text{LTLR}$ are left skewed. Kurtosis statistic is showing that all variables are leptokurtic (having long tail / higher peak). Jarque–Bera statistics is showing that all variables except $\ln\text{PDF}$ have insignificant probability values which are showing that residuals are normally distributed. Even residual are

not normally distributed we still can accept model as many researchers accept model even residuals were not normally distributed (Chaudhry *et al.*, 2012; Mohi-u-Din & Mubasher, 2013).

Table 4.1.3.1 Descriptive: Liquidity Reserve Model

	TLR	PDF	DFR	%RS	LTLR
Mean	14.266	16.547	14.424	5.071	14.038
Median	14.432	16.829	14.746	5.039	14.151
Maximum	16.761	18.984	17.715	9.591	16.489
Minimum	11.395	12.096	11.109	1.050	11.395
Std. Dev.	1.211	1.306	1.7192	1.870	1.170
Skewness	-0.408	-1.049	-0.266	-0.007	-0.427
Kurtosis	3.060	4.715	2.255	3.090	2.836
Jarque-Bera	1.336	14.690	1.678	0.017	1.355
Probability	0.513	0.001	0.432	0.991	0.508

4.1.3.2 Model Estimation: Liquidity Reserve Model

This part of the analysis provides estimation of the liquidity reserve model, which considered liquidity reserve (TLR) as dependent variable and investment in financing (PDF), total profit from operational financing (DFR), % of revenue sharing on deposit (%RS) and lag of total liquidity reserve (LTLR) as independent variables. Estimation in the part of analysis is made through random and fixed effect estimation models and Hausman specification test is use to choose better estimation model. Table 4.1.3.2.1 provides fixed effect model estimation results for liquidity reserve model.

R-square of the model is 0.80, which indicates that explanatory power of the model is good as 80% of the variation in liquidity reserve is explained by the variables included in the model. F-statistics of the model is 17.57 that also entails the model is good fit at 1% level of significance.

Table 4.1.3.2.1&4.1.3.2.2 Fixed Effects and random effects model: Liquidity Reserve Model

Variable	Fixed effects model 4.1.3.2.1	Random effects model 4.1.3.2.2
	3.5768	3.0413
Constant	[1.3149] (0.0102)	[1.1401] (0.0112)
PDF	0.1335 [0.1014] (0.0196)	0.1636 [0.0763] (0.0386)
DFR	0.2079 [0.0645] (0.2025)	0.1690 [0.0557] (0.4400)
%RS	-0.0140* [0.0753] (0.0853)	-0.0861* [0.0454] (0.0655)
LTRL	0.4081 [0.0876] (0.0000)	0.4784 [0.0799] (0.0000)
R-squared	0.8052	0.7825
Adjusted R-squared	0.7594	0.7596
F-statistic	17.57681	34.1947
Prob(F-statistic)	0.0000	0.000000
Durbin-Watson stat	2.1871	2.2231
Note: Standard errors in [] & probability in ()		
*significant at 10%		

First independent variable of the study is total investment in financing (PDF) which yielded beta coefficient of 0.1335 along with a probability value of 0.0196 implying that the impact of total investment financing on liquidity reserve is positive and also significant at 5% level of significance. It shows that 1% increase in lnPDF raises liquidity reserve (TLR) by 13%. Second independent variable of the model is total profit from operational financing (DFR) which provided a beta coefficient of 0.2079 along with a probability value of 0.2025, providing that impact of DFR on TLR is positive but insignificant. Third variable of the model is % of revenue sharing (%RS) on deposits, which yielded a negative direction of relationship with total liquidity

reserve (TLR) as indicated by a beta coefficient of -0.0140 along with a probability value of 0.0853 implying that impact of % of revenue sharing has a negative but significant impact on liquidity reserve at 10% level of significance. Lastly, lag of total liquidity reserve (LTLR) yielded a beta coefficient of 0.4081 along with a probability value of 0.000, indicating that impact of lag of total liquidity reserve on total liquidity reserve is positive and also significant at 1% level of significance. A 1% increases in lnLTLR increases liquidity reserve (TLR) by 40%.

Overall, fixed effect estimation of liquidity reserve model provides that the impact of total profit from operational financing and total liquidity reserve have positive and significant relationship total liquidity reserve and while this impact was negative and significant for % of revenue sharing.

Table 4.1.3.2.2 provides random effect estimation of the liquidity reserve model. R-square of the model is 0.78, which indicates that almost 78% of the variation in the total liquidity reserve is accounted for by the variables included in the model. Further, F-statistics of the model is 34.19, which implies that model is good fit at 1% level of significance.

First independent variable represents investment in the financing (PDF), which yielded a correlation coefficient of 0.1636 along with a probability value of 0.0386 implying that impact of investment in financing is positive and significant. It suggests that a 1% increase in lnPDF increases liquidity reserve (TLR) by 3.8%. Second independent variable of the study is total profits from operational financing (DFR), which yielded a beta coefficient of 0.1690 along with a probability value of 0.4400, indicating that the impact of profit from operational financing on

liquidity reserve is also insignificant. Third variable of the study is % of return sharing on deposits, which provided a negative -0.0861 beta value with significant probability value 0.0655 at 10% level of significant, indicating that impact of % return sharing on deposits on liquidity reserve is negative and significant. It implies that due to increase in log of % of return sharing on deposits decreases in liquidity reserve (TLR). Lastly, lag of total liquidity reserve yielded a positive beta coefficient of 0.4784 for the dependent variable of total liquidity reserve. The probability value of this relationship is 0.000 indicating that the positive impact of lag of total liquidity reserve on total liquidity reserve is significant at 1% level of significance. Findings also suggest that 1% increase in log of lag of total liquidity reserve increases liquidity reserve (TLR) by 47%.

Overall, investment in the financing and lag of total liquidity reserve yielded a positive and significant impact on total liquidity reserve and % return sharing on deposits was found to have a negative and significant relationship with dependent variable of total liquidity reserve.

Table 4.1.3.2.3 provides Hausman specification test results for selection of better estimation model from random effect and fixed effect estimation. The test probability value of 0.4109 indicates that there exist significant differences between the beta coefficients calculated in random effect and fixed effect model. Thus, random effect model provides better estimation of liquidity reserve model.

Table 4.1.3.2.3 Hausman Specification Test: Liquidity Reserve Model

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Probability.	Decision
Cross-section random	3.964257	4	0.4109	Random effects model

Overall, incomes from operational financing and lag of total liquidity reserve have an association. Further there is a negative impact of percentage of revenue sharing on total liquidity reserve.

Diagnostic tests for Liquidity Reserve Model

Table 4.1.3.2.4 Pearson's correlation coefficient matrix

Correlation (Probability)	lnTRL	lnPDF	lnDFR	PRSD	lnLTLR
lnTRL	1.000000				
lnPDF	0.621819*	1.000000			
lnDFR	0.679339*	0.481411*	1.000000		
PRSD	-0.078788	0.027927	-0.069584	1.000000	
lnLTLR	0.796175*	0.510086*	0.508486*	0.143976	1.000000

*** indicates significance at 5% level of significance**

As presented in Table 4.1.3.2.4, study at hand employed Pearson's correlation coefficient matrix to know about multicollinearity among projected variables in liquidity reserve model. Present study used explanatory variables Investments in operational financing, Income from operational financing, % of revenue sharing on deposits and lag of total liquidity reserve. Results showing that correlation coefficients for all variables are less than .8, which is evidence of no multicollinearity, therefore we can conclude that liquidity reserve model is reliable (Cooper,2008; Gujarati,2003) .

Table 4.1.3.2.5 Serial correlation

Null hypothesis: No serial correlation

Test	Fixed effects Model	Random effects Model
Durbin-Watson Statistics	2.1871	2.2231

Table 4.1.3.2.5 showing results of serial correlation, Durbin-Watson is more than two is strongly rejecting alternative hypothesis of, there is serial correlation. Therefore we shall conclude that Liquidity Reserve Model is free from serial correlation problem.

Table 4.1.3.2.6 Residual Cross-Section Dependence Test

Null hypothesis: No cross-section dependence (correlation) in residuals

Test	Statistic	d.f.	Prob.
Lagrange Multiplier (LM)	7.4642	4	0.6810

Residual Cross-Section Dependence Test results are in Table 4.1.3.2.6, which showing probability values more than 5%, hence we can easily reject alternative hypothesis which is there is cross section dependence. On the base of liquidity reserve model we can conclude the model is not suffering from Residual Cross-Section Dependence which is desirable.

Chapter 5

Primary Data Analysis for Islamic Bankers and Depositors

5.1 Liquidity Management in Banks: Questionnaire Survey Results

This section provides the results of surveys conducted to assess the opinion of both Islamic bankers and Islamic bank depositors in context of market success and liquidity management of Islamic banks. The analysis in this section is divided into two subsections where Subsection 5.2.1 provides results relating to the depositors of Islamic banks and Subsection 5.2.2 provides the results relating to the Islamic bankers of Pakistan.

5.1.1 Questionnaire responses of depositors

This part of the analysis provides analysis of the survey conducted with the depositors of Islamic banks. A total of 270 respondents responded to the survey. The survey contained questions related to awareness and knowledge of Islamic banking, its preference over conventional bank, investment motive in Islamic banks and their liquidity-related behavior. The first part of the analysis provides a description of the education level of the sample. After that, usage and awareness of Islamic banking products is investigated; then, the motives of depositors to use Islamic investments are highlighted, followed by the respondents' opinions as to when they might exit Islamic banking. Remarks are then made which summarize the findings.

5.1.1.1 Education level of the respondents

Table 5.1.1.1 provides the educational distribution of the depositors of Islamic banks who completed the survey. The total of depositor respondents was 270, out of which 104 (38.5%) had an undergraduate degree, 153 (56.7%) had a postgraduate degree and remaining 13 (4.8%) respondents had doctorate or any other research-based degree. The results indicate that depositor

respondents considered in the study are well educated and are likely to be able to judge the difference between Islamic and conventional banking.

Table 5.1.1.1 Education distribution of depositor respondents

Latest degree of education

	Frequency	Percent	Valid Percent	Cumulative %
Undergraduate Degree	104	38.5	38.5	38.5
Postgraduate	153	56.7	56.7	95.2
Valid Doctorate/Research Degree	13	4.8	4.8	100.0
Total	270	100.0	100.0	

5.1.1.2 Awareness and usage of Islamic banking

This part of the analysis indicates the respondents' awareness and usage of Islamic banking products, services and conception. The questions were asked in binary format: yes or no. Table 5.1.1.2 provides the responses of the respondents with regard to their awareness, knowledge and usage of Islamic banking products, where only frequency and percentage of the affirmative responses are provided.

The analysis indicates that out of total of 270 depositor respondents, only 127 respondents (47%) use Islamic bank financing of any shape. Slightly more 153 (56.7%) indicated that they understand Mudarabah saving deposits. This awareness declined when respondents were asked about understanding Islamic banking operations and Shariah principles (110 respondents, 40.7%). When asked about the monitoring of performance of Islamic banks, 144 (53.3%) respondents opined that they monitor the performance. Furthermore, 177 (43.3%) respondents indicated that they also have an account in a conventional bank. On the question of satisfaction, 178 respondents (65.9%) opined that they are satisfied with the facilities provided by Islamic

banks. Lastly, depositors also seemed to have profit motive as 166 respondents (61.5%) stated that they earn bigger revenue sharing return on their deposits as compared conventional bank.

Table 5.1.1.2 Depositors' awareness and their usage

Statements	Frequency	Percentage
I always use Islamic bank financing (house financing, car financing).	127	47%
I completely understand about <i>Mudarabah</i> saving deposits.	153	56.7%
I fully understand the Islamic banking operation and <i>Sharia</i> principles.	110	40.7%
I frequently monitor the performance of my Islamic bank.	144	53.3%
I also have an account in a conventional bank.	117	43.3%
I am satisfied with my bank's facilities (debit/credit card, gift, etc.).	178	65.9%
I usually earn a bigger revenue-sharing return on deposits (profit motive)	166	61.5%

Overall, depositors seem to lack knowledge and awareness of the potential of Islamic banking and its mechanisms. Furthermore, some respondents are motivated by profits and some have an account with a conventional bank. This implies that there exists a gap in awareness and thus, depositors seem to be more motivated by the returns as compared to Islamic notions. This indicates that depositors are still confused regarding the true status of Islamic banks as to whether these banks are truly Islamic or not.

5.1.1.3 Intentions of Islamic depositors

This part of the analysis provides a description of the intentions of the depositors as to why they deposited their money in Islamic banks. Table 5.1.1.3 provides the responses of the respondents in this regard.

The question relating to religious and investment motive yielded the highest mean whereby depositors were asked as to whether they deposited their money to support Islamic investment projects for the sake of people. The mean for this opinion was 3.69 on a scale of 1 to 5. This

indicates strong inclination of depositors to support Islamic investments. But the standard deviation of this opinion was also high: 1.325. This implies that the opinions of depositors regarding supporting Islamic investment projects are scattered and not alike. Further, depositors were asked whether they have deposited their money to support development of Islamic banking and business sector and the opinion of depositors again yielded a mean of 3.54 along with a standard deviation of 1.128. Again the inclination of the investors towards Islamic banking and business development is evident from the responses of depositors.

Table 5.1.1.3 Intentions of the depositors

Descriptive Statistics			
	N	Mean	Std. Dev
I want to support Islamic investment projects for the sake of people (ummah) (Religious and investment motive).	270	3.69	1.325
I deposit my money to support the development of Islamic banking and business sector.	265	3.54	1.128
I deposit money because there is no restriction on withdrawals or numbers of transactions in short-term investment.	270	3.51	1.172
If I want to take money then there is no deduction of service charges if the balance maintained is low after withdrawal.	270	3.45	1.286
I want to withdraw the amount and amount is deducted in short-term before maturity.	270	3.23	1.107
It will make me easy to get bank's financing facilities (free loan, house financing, etc.) (Commercial motive).	270	3.13	1.065
I want to take my money in its 1 month maturity date (routine transaction motive).	270	3.08	1.039
I want to switch tenure of my deposit from short-term into long-term one.	270	3.08	1.134
I want to take my money in between 3 to 6 months in its maturity date.	270	3.02	1.072
I want to take my money after 1 year (12 month tenure) in its maturity date.	270	2.89	1.117
Valid N (listwise)	265		

Where there was no restriction on money withdrawals and number of transactions, the mean value of the depositors' opinions was 3.51 along with a standard deviation of 1.172. Further, depositors also seemed to value the notion of no deductions in case the account balance is lower than the minimum balance requirement. The mean value for this opinion was found to be 3.45

along with a standard deviation of 1.286. Subsequently, depositors also opined that they would like to deposit their money where no deductions are made for the early withdrawals of money in the short term. The mean value for this opinion was found to be 3.23 along with a standard deviation of 1.107. All of these three opinions ranked after religious motive indicate that after religious motives customers have certain transactional preferences where limits to withdrawal, service charges and early withdrawal penalties are not liked.

There was also weak support for the commercial motive of the depositors where depositors preferred to deposit their money in a bank from where they would like to get certain financing facilities like car financing, house financing and free or less costly financing. The mean value of this opinion was 3.13 along with a standard deviation of 1.065, implying that there was some support to the commercial motive as well from the respondents, but the support was not that strong as the mean value is near the neutral value of 3.

Lastly, the withdrawal routine of the depositors of Islamic banks was also assessed where investors preferred to withdraw their money within one month of the maturity date as compared to the longer tenures of within 6 months and within one year. The mean value of the withdrawal preference within one month was 3.08 (standard deviation = 1.1039), between 3 and 6 months was 3.02 (standard deviation = 1.072) and after one year was 2.89 (standard deviation = 1.117) indicating that people prefer to withdraw their money soon after maturity. Also routine transaction motive was not that strong as compared to the religious or transaction motive as indicated by the low mean value of questions representing the motive, but still one can argue that depositors value early withdrawals after maturity and do not like to pile their money up in a

dormant manner. Apart from that, transferring their money from short-term to long-term maturity tenure deposit was also not welcomed by many of the depositors. This is indicated by the lower mean value of 3.08 (standard deviation = 1.134). So, one might argue that investors prefer to have money back as soon as possible and do not like to wait much in this regard.

Overall, religious motive highlighting support of Islamic banking was a much intended act of the depositors, which was followed by transaction motive characterized by lower withdrawal restrictions along with less charges and penalties related to early withdrawal. After that came commercial motive, where depositors required certain services or facilities in the form of low rates and financing from the bank. Lastly, it was also indicated that after maturity, depositors prefer to withdraw the amount early.

5.1.1.4 Depositors' opinions on reasons for closing their account

This part of the analysis discusses the potential reasons why depositors might close their account in an Islamic bank. Table 5.1.1.4 provides a description of the reasons and their relative importance. The topmost reason for which depositors might close their account was found to be related to the economic conditions. The mean value for the notion that depositors might want to close their account because economic conditions would require them to hold hard cash in hand yielded a mean of 3.25 along with a standard deviation of 1.181. The second strongest potential reason to close an account was related to the returns. Depositors opined that they would close their account if their return sharing paid by the Islamic banks would be lower as compared to the interest rate of conventional banks. The mean for this notion was found to be 3.25 along with a standard deviation of 1.105. This makes sense in the context of the financial literature where investors require additional return for increased risk; since Islamic banks offer a risk-sharing

mechanism of investment, depositors should demand a higher return from it. But these notions might not be in line with the Islamic context, where interest is forbidden and is deemed Haram.

Table 5.1.1.4 Descriptive Statistics of Depositors

Descriptive Statistics			
	N	Mean	Std. Dev
Economic conditions require me to hold cash in hand.	265	3.29	1.181
My Islamic bank pays lower return sharing than interest rate in conventional banks.	270	3.25	1.105
It does not have proper network services, IT and offer attractive banking products.	270	3.04	1.196
It is proven not to be a Sharia-compliant Islamic bank.	270	2.96	1.009
I am facing service issues at my existing Islamic bank.	270	2.91	1.109
My Islamic bank does not pay competitive return as I expected.	270	2.89	1.061
Valid N (listwise)	265		

The third reason for which almost a neutral response from the depositors was found was related to the banking products and services, where depositors were asked as to whether they would quit their bank if it did not have proper network services, IT infrastructure and products. The responses yielded a mean value of 3.04 along with a standard deviation of 1.196. This indicates that investors are neutral about the products and services of Islamic banks.

It is interesting to note that depositors provided a neutral response to the statement asking them as to whether they would quit the Islamic bank if it was proved that it was not Shariah compliant: mean value of 2.96 (standard deviation = 1.009). Subsequently, depositors were also probed as to whether they were facing service-related issues from their Islamic banks or not. The mean value of 2.91 (standard deviation = 1.109) indicated that on average investors do not think that there are any issues relating to the services of the banks. Investors further rejected the notion that Islamic banks paid them less returns as indicated by the mean value of 2.89 (standard deviation =

1.1061). This indicates that Islamic banks are considered quite competitive by the depositors in terms of returns and in terms of services.

Overall, depositors seem to be more interested in economic and return reasons as compared to the religious and service-related issues. This means that the notion that Islamic banks have a competitive advantage over conventional banks by just being Islamic is false. Islamic banks should consider economic reasons a bit more seriously in the context of customer retention.

5.1.1.5 Remarks on the depositors' opinions

Overall, it was found that although the depositors of Islamic banks use Islamic banking products, they are not very aware of the nature and mechanisms of Islamic banking or that Islamic banks are in direct competition with conventional banks in terms of returns and services. Further, many depositors also had accounts with conventional banks. Moreover, these depositors also seemed to have good levels of satisfaction with services and return rates of their Islamic banks. In terms of their motives, although the depositors have religious intentions, they seem to be more motivated by a profit motive and transaction-related aspect of Islamic banks. Depositors seemed to prefer early withdrawals after maturity. Lastly, return and economic credentials were found to be the main reasons for which depositors might close their accounts with Islamic banks. Further, religious or service delivery reasons were not found to be important in that regard. It was also found that Islamic banks had better rates of profit sharing and a good service structure to serve their customers.

Investors do not like to keep their money with a bank for extra time after maturity and neither do they like penalties, delays, charges and other restrictions on the withdrawal of funds even prior to

maturity. Apart from being competitive, Islamic banks must maintain a solid liquidity position to instill confidence in the depositors. This is necessary even if the Islamic banking segment has matured in the past decade.

5.1.2 Questionnaire responses of bankers

Another survey questionnaire was distributed among the bankers working in Islamic banks of Pakistan. A total of 265 Islamic bankers responded to the survey. The banker respondents were asked to respond on a five-point Likert scale. Responses to this survey are presented in this section of analysis. The survey contained two parts whereby the first part explored the organizational structural aspects of the Islamic banks in relation to liquidity risk management. Analysis of this part is provided Subsection 5.1.2.1 of the analysis. The second part of the survey contained responses of the Islamic bankers on the risk management practices adopted by the Islamic banks in Pakistan. Analysis of second part is provided in Subsection 5.1.2.2 of this chapter. Remarks are then made in Subsection 5.1.2.3 which summarizes the findings.

5.1.2.1 Organizational structure of Islamic banks

This part of the analysis provides a description of the organizational structure of Islamic banks in relation to liquidity risk management. Respondents were asked whether Islamic banks have separate positions and experienced staff specifically for liquidity risk management in the organizational hierarchy or not. Table 5.1.2.1 provides the responses of respondents in this regard. Responses were solicited on a yes and no basis; affirmative responses are reported here.

The first question asked the respondents with regard to organizational structure whether Islamic banks have special department, division or team to deal with risk management or not. Out of a

total 265 respondents, 259 respondents confirmed that they have a special team or department to deal with risk management in Islamic banks. Subsequently, it was asked whether there is someone who takes responsibility for liquidity management. Again 257 respondents (97% of the total sample) admitted that they have a particular director or manager who manages liquidity risk management.

Table 5.1.2.1 Organizational structure in Islamic banks

Particulars	Frequency	Percentage
Is there a special Division/Team dealing with risk management?	259	97.70%
Is there a particular Director/Manager responsible for liquidity management?	257	97.00%
Coordinate liquidity management decision with the SBP?	260	98.10%
Depend on SBP decision (direction) to manage liquidity risk problem?	255	96.20%

Subsequently, policy compliance issues in liquidity management were also investigated and information was sought as to whether decisions relating to liquidity management are coordinated with SBP or not. A total of 260 respondents (98.10%) stated that they coordinate liquidity management decisions with Pakistan. Lastly, 255 Islamic banker respondents (96.20%) agreed that they rely on the directions of SBP for liquidity risk management.

Overall, it seems that Islamic banks in Pakistan do have proper mechanisms to manage liquidity risk and, further, federal agencies like SBP take a keen interest in liquidity risk management of the banks. They not only seem to monitor the liquidity risk management practices of the banks but also provide direction in this regard.

5.1.2.2 Liquidity risk management practices in Islamic banks of Pakistan

This part of the analysis provides a description of the risk management practices in Islamic banks of Pakistan. The banker respondents were asked to respond on a five-point Likert scale. Table 5.1.2.2 provides a description of the liquidity risk management practices and related aspects.

First, bankers yielded a mean value of 4.45 along with a standard deviation of .972 for the efficiency of the risk management team. This implies that Islamic banks in Pakistan have a better competitive position in the context of liquidity risk management as compared to conventional banking. The liquidity risk management team seems efficient and effective in this regard. Second, bankers were also positive about their banks following the liquidity requirement as per Basel-III accord: mean value of 4.34 (standard deviation = .928).

Bankers further indicated that they have effective strategies to communicate with depositors as to when they might need their deposit money back. A mean value of 4.28 (standard deviation = 1.134) indicates that Islamic banks have a strong communication mechanism with their customers which keeps them informed as to when the customers might withdraw their deposit money from the bank. This helps Islamic banks to manage their liquidity in advance. Bank employees also stated that their risk management team is well equipped and technologically up to date and, thus, is prepared for liquidity risk management. The mean value of this opinion was 4.27 along with a standard deviation of 1.048.

Table 5.1.2.2 Liquidity risk management practices in Islamic banks of Pakistan

Descriptive Statistics			
	N	Mean	Std .Dev
Your bank's liquidity risk management team is efficient enough as compared to your competitor banks.	265	4.45	.972
Your bank strongly follows liquidity requirements as per Basel-III accord.	265	4.34	.928
Your bank has strong strategies to communicate with your depositors who have big amount of deposits regarding their withdrawal time/schedule.	265	4.28	1.134
Your liquidity risk management team is well equipped, trained and technologically up to date to manage, monitor and control liquidity risk.	265	4.27	1.048
Your bank regularly calculates and analyzes pattern of liquidity withdrawal for anticipation and onward action to re-gear fresh deposits.	265	4.22	1.259
In case of sudden liquidity drain, your bank has strong interim liquidity strategies to cope with this issue.	265	4.15	1.124
Your bank strongly follows liquidity requirements as per requirements of SBP.	265	4.13	1.172
Your bank has strong marketing team to search for fresh deposits.	265	4.12	1.262
Your bank puts extra liquidity above your reserve requirements.	265	4.11	1.163
Your bank maintains adequate cash reserve to manage day-to-day liquidity issues.	265	4.10	1.216
Your bank convinces depositors to lengthen tenure of time deposits from short-term into long term for retention of term deposit for term financing purposes.	265	4.07	1.236
In case of short-term liquidity need, your bank locates some short-term deposits from money market and liquidity through sale of Sharia certificates.	265	4.05	1.235
Your bank allocates some funds in the form of investment risk reserve (IRR) and profit equalization reserve (PER).	265	4.03	1.238
To minimize cost of funds, your marketing team prefers to procure current and saving deposits instead of term and costly deposits.	265	4.00	1.267
As a majority of the population is Muslim, public awareness campaign for Islamic deposits (as per Sharia compliance) is one of the main objectives of your bank.	265	4.00	1.319
Valid N (listwise)	265		

Further, it was probed from the bankers whether their bank adopts a proactive approach to manage liquidity risk and analyzes patterns of liquidity withdrawal and tries to re-gear fresh deposits in anticipation. A mean value of 4.22 (standard deviation = 1.259) indicated that Islamic

banks in Pakistan actively try to manage their liquidity and balance assets and liabilities in this regard. Apart from that respondents also opined that their bank has some alternate plans in case of sudden liquidity drain. A mean value of 4.15 along with standard deviation of 1.124 indicates that Islamic banks have planned workable strategies to cope with uncertainties and unforeseen circumstances related to liquidity management. Apart from the internal liquidity management mechanism, the banks also seem to have external pressure from SBP and bankers opined that their bank strictly follows liquidity requirements as per requirements of SBP. A mean value of 4.13 was ascertained in this regard along with a standard deviation of 1.172.

There was also an indication that Islamic banks maintain their liquidity management approach through various aspects of banking services, operations and functions. Bankers in this regard stated that their banks have a strong marketing team, which replenishes the deposits in order to maintain liquidity of the banks (mean = 4.12, standard deviation = 1.262); furthermore, they also opined that their bank maintains more liquidity than the essential reserve requirements put by SBP on Islamic banks (mean = 4.11, standard deviation = 1.163). Banks were also found to maintain adequate cash reserves to deal with daily liquidity-related issues (mean = 4.10, standard deviation = 1.216). Thus, banks not only try to maintain extra reserves but also push their marketing team to generate more deposits. Adequate reserves are maintained above the margin requirements imposed by SBP in order to remain at ease.

Further, Islamic banks try to manage their liquidity concerns through various systematic ways, such as convincing their depositors to convert short-term deposits into long-term deposits (mean = 4.07, standard deviation = 1.236). This allows banks to be less concerned about paying pack

the money held in saving or current accounts. There was also an indication that Islamic banks can secure some short-term financing from money market in case of emergency funding requirements (mean 4.05, standard deviation = 1.235); this provides banks the necessary flexibility to take moderate risks and deal with the ups and downs relating to the demands of funds from depositors. In addition, banks also allocate some funds to the IRRs and PER (mean = 4.03, standard deviation = 1.238). These reserves help Islamic banks to manage their liquidity in a better manner. All of this is done by balancing the costs of the deposits where short-term deposits or saving deposits are less costly and time deposits are more costly, thus, employees also opined that a marketing team also bring current and saving deposits and preference is given to such depositors because these deposits are less costly (mean = 4, standard deviation = 1.267).

Lastly, bankers were asked as to whether Islamic banks play an active part in spreading awareness of Islamic banking. The mean for this statement was 4 along with a standard deviation of 1.319. The standard deviation was a bit high indicating that different bankers held different opinions on the matter. As awareness of Islamic banking came in the end, it could be argued that it is the least priority of the banks and as banks rely on their Islamic image while marketing, the mean for this statement was also high.

Overall, it was found that Islamic banks use a multidimensional approach to manage their liquidity issues, in which all functional aspects of their operations support their maintenance of liquidity. Liquidity managers seem good, the marketing staff is inline in the context of liquidity management, regulators like SBP are playing their role, alternative plans for liquidity management in crises are inline and there is the option of money market at hand as well. Overall,

it seems that the Islamic banking segment is practicing banking in a safe and sound manner. But there still is some indication that Islamic banks are not providing awareness to their consumers regarding the Islamic mechanism of banking and their authenticity.

5.1.2.3 Remarks on Islamic bankers' opinions

Overall, the organizational structure of Islamic banks in Pakistan has positions for liquidity management personnel, and the SBP seems to play its role of liquidity management in Islamic banking segment of Pakistan very diligently. All the banks are tightly monitored, regulated and directed by the SBP. That is why when liquidity crunches hit the world the Pakistani banking segment remains unaffected by global turmoil.

In context of liquidity management practices, bank employees implied that the liquidity risk management mechanism of the Islamic banks is good. Further, Islamic banks in Pakistan were adopting best practices for liquidity management, which not only maintain liquidity but also minimize the costs. The liquidity management of Islamic banks in Pakistan seemed a multidimensional concept where all of the departments and employees contribute towards it. Islamic banks also seemed to have clear plans in place to tackle extreme fluctuations and there is an alternative mechanism to arrange liquidity from the money market. The seemingly interesting finding in this regard was that Islamic banks rely on conventional means and mechanisms for arranging liquidity. The least ranked alternative in the quest of liquidity management was spreading awareness among customers of Islamic banking mechanisms and practices so that the customer is motivated to deposit money in the bank. All other categories like capabilities of the higher management, regulatory framework, marketing, employee consciousness, analysis and planning surpassed the Islamic awareness which is considered a key competitive advantage of

Islamic banks over the conventional ones. This finding might have arisen because most of the managers of Islamic banks come from conventional banks and they implement their old style and policies in the Islamic banks because of the idea that ‘things are done like this in the industry’.

Chapter 6

Qualitative Data Analysis for Liquidity Measures

6.1 Liquidity Management Issues in Islamic Banks: A Qualitative Data Analysis

This part of the analysis analyzes the qualitative data collected through semi-structured interviews of both Islamic bankers and depositors. The purpose of this analysis is to provide a detailed insight into the liquidity management process and perspectives of both managers and depositors of Islamic banks. This part of analysis is divided into two subsections, whereby the first subsection of the analysis analyzes the responses of the managers of the bank and the second part of the analysis explores the opinions of the customers of the Islamic banks.

6.1.1 Analysis of the Islamic bankers' interviews

This part of the analysis provides an exploratory overview of the responses of the Islamic bankers, who were interviewed in order to have an insight into the liquidity management process of the Islamic banks in Pakistan. Managers were asked about the liquidity, products and services offered by the bank, liquidity management practices, role of SBP in liquidity management, structural support in liquidity management and marketing mechanism to attract depositors. Comments on the findings are made by the researcher at the end of this subsection.

6.1.1.1 Liquidity

The first thing asked of the bankers was related to their notions of liquidity; they related liquidity with 'deposits' and balancing between 'cash inflow and cash outflow'. There were also indications of 'attracting more customers' and 'financial crunch' etc. The major focus of the bankers remained on cash inflow and outflow balance and deposits(Akkizidis & Khandelwal, 2008). As one banker explained:

Liquidity is on a day-to-day basis. Apart from that, our clients or customers also keep money with us on time basis. The cash flow we receive on day-to-day basis in current and saving accounts and likewise there are term deposits, and when customers need it, we are liable to give that to customers according to their demand. So we have cash inflow as well as outflow.

This indicates that liquidity is depicted by the inflows in the shape of deposits, whether in current account, saving account or in the shape of time deposits and outflows as to when the customer might need that money (Fiedler, 2000). If money inflow is great, the liquidity condition of the banks would also be good as the cash inflows are booked by the bank on a regular basis as explained hereunder.

Liquidity is that the money depositors bring to us, we maintain that and book that like to state bank or we invest somewhere and if customer comes and demands money prior to the predetermined tenure, how we would fulfill this, this is work of policy making.

So, the amount deposited by the customers is either sent to state bank in shape of the reserve requirements or is invested somewhere to earn profits, but all the money could not be used as some customers demand their money back, when they need it, and the bank has to fulfill their demand. So, a bank has to maintain appropriate cash levels to meet the cash demands of its customers. If more cash is kept with the bank, the profits of the bank decline and if less cash is retained at hand, there is a possibility of cash out, which might lead towards liquidity crunch and the trust of the public could be shaken in such conditions. This is indicated in the following words.

If financial crunch happens or any financial strain comes, panic is created; people rush towards banks to ask for their money.

Thus, the better option for the banks is that they either maintain cash reserves at hand or bring more deposits, which could fulfill day-to-day cash demand of their customers. So in the opinion of the bankers ‘liquidity is what depositors bring to us’. It was also noted that attracting more customers and being more popular in the industry is considered good for the liquidity of the bank. This point was made:

Islamic banking is even being promoted in Europe ... it is getting more popular ... there are few banks doing conventional banking only. Summit Bank, Samba Bank, Askari Bank, almost all banks are doing some Islamic banking. It means that our people are observing it and the liquidity position of Islamic banks is getting better.

So, liquidity is basically maintaining a balance between cash inflows and outflows of the bank in a manner that the cash demand of the customers is met easily and profits of the bank are not compromised and bringing deposits and attracting new customers is considered very important in this regard.

6.1.1.2 Regulators and liquidity management

Islamic bankers were asked about the cash reserves that they are bound to keep with the SBP. In this regard, the state bank has a capital requirement and a reserve requirement. Capital requirements allow any bank to start operations in Pakistan and after that reserve requirements are set to discourage unnecessary risky behavior of the banks. SBP is considered a strict

regulator, which ensures that capital and reserve requirements are dually met (Akhtar & Ahmed, 2011). One banker described it as:

Basically the state bank of Pakistan has the cash reserve requirements and we have to maintain that. Market is competitive and State bank wants to ensure that banks increase their capital and in this context they provide a blueprint that you have to open many branches.

State bank monitors all the banks, both Islamic and conventional banks, in this regard and takes stern action against banks which do not comply with the reserve requirements and this is done in a formal way as stated by a manager.

You are audited and there are surprise checks. State bank sees if there is mishandling of things. The foreign currency or remittances you receive are discussed with them on a monthly basis, because they have to maintain your books, so that's how working is done.

Apart from these surprise checks and regular updates, the state bank levies penalties on non-compliance with the requirements as indicated by a banker.

We have leverages on that but these are for the time being, we cannot burst the balloon and if we do, we have to pay certain penalties.

This indicates the stringent control of the state bank on the banks in Pakistan, whereby banks are not allowed to sanction loans beyond certain limits as to ensure liquidity credentials of the banks.

Bankers also indicated that the reserve and capital requirements have increased over time from SBP. A banker stated that:

The capital requirement for the conventional banks used to be 10 billion and now it is 12 billion, they would bring it to 16 billion, while many of your Islamic banks have capital requirement of 5 to 6 bn ... State bank also directed Islamic banks to promote their banking.

Thus, the indication is that SBP is promoting Islamic banking as their capital requirements are low along with their branch requirements. Another banker related to this by stating

The reserve of Islamic banks is 6 billion; you can say it is 7 billion. Base point is 6 billion, you get license to bank and in Islamic banking there is no limit on minimum branches up till now.

A banker also stated that nowadays SBP is only issuing Islamic banking licenses and no conventional banking licenses are being granted as of now. All of this indicates that in Pakistan, the State bank has a tight check and control over the banking segment, there are fewer chances that banks will indulge in some risky behavior and the liquidity position of the banks is secure. Apart from that it was also found that SBP is supporting Islamic banks and discouraging conventional banks. Capital and branch requirements for Islamic banks are lenient and minimal. So, regulators play an important part in liquidity management of the banking sector in Pakistan and this applies to both conventional as well as Islamic banks.

6.1.1.3 Liquidity management in Islamic banks

This part of the analysis provides an insight into the liquidity management process of the Islamic banks in Pakistan. Both formal and informal mechanisms are discussed. Formally, it was indicated that banks have predetermined reserve ratios, which they have to comply with, and then there are the automatic teller machine (ATM) requirements of each branch. Moreover, it was also indicated that branches cannot keep extra cash; cash is dispatched to the head office on a daily basis. Branches estimate their cash requirements on an experience basis and excess cash is not retained with the branch. This procedure is strictly followed as one banker explained.

If we receive any payment late because there is a fixed time for shipment, like if it comes at 4:00, they take shipment of cash at 4:00 and if any customer deposits any cash after 4:00, that we take with us. We try to ship that as well but if the vehicle is not available we keep that with us and we have to insure that separately. It then is shipped next day.

So, each bank tries to optimize its cash on a formal note, where extra cash is dispatched to the head office on a daily basis. Then there are certain informal ways to manage liquidity of the bank. For example, major customers are encouraged to intimate in advance for their cash requirements, cash payments are discouraged and check-based payments are encouraged, a better relationship with the customer is developed in order to assess their cash requirements in advance and marketing staff is encouraged to bring in more deposits (Affinito, 2012). Such informal ways are quoted by Islamic bankers in the following instances.

Mostly big customers inform us one or two days earlier how much cash they want to withdraw. So, we then are able to manage this in advance so that they do not face any issue when they come to take the money.

So, major customers give the bank advance notice if they need hard cash and the bank can then arrange for the money. Similarly, better customer service and close intimacy is maintained with customers (Munir & Lodhi, 2015), so that bankers might be able to better assess their cash requirements in advance. It was indicated that:

Our relationship with the customers is of such a nature that we know when they are going to purchase property, purchase a car, when they are going to invest where, we have ideas in advance. So we try to cover this so that when they need to withdraw a payment we have it and we have to maintain the branch deposit level at that point.

A banker went far in this context and iterated that:

The first thing I told you, service. Give him service, what he says is right, if you want to do business with him, you need to know everything about him, what his doctor or lawyer knows about him. If the customer shares with you things that he does not share with his wife then you are a banker, he should have trust in you.

The service perspective was also much highlighted by the managers, where better customer service was presumed to be the key of improving customer base (Munir & Lodhi, 2015) and liquidity as one banker stated.

In those banks customer do not get services, so we offer services and by means of these services we increase our cash base. So we focus on services or you may say our personal links, like our acquaintances, friends and relations, word of mouth. Through these we increase our liquidity base.

So, Islamic banks try to balance both inflows and outflows in order to improve liquidity position. Regular cash is maintained on the basis of experience or requirements, for instance one banker indicated a requirement of ‘Rs. 2 million’ for ATMs, and cash requirement with the bank are based on the basis of past experience or practice. It was indicated that:

For daily customers we have an idea on the basis of experience on who would withdraw what amount, which means we know the daily requirement. So we are able to manage that.

Thus, informal mechanisms of liquidity management are quite active in Islamic banks of Pakistan, where a close relationship is maintained with the customers and liquidity is managed in an informal manner (Affinito, 2012). There are also certain policy precautions through which these banks manage liquidity. These measures are related to specific types of customers like customers who have invested their money in time deposits or people who have opened a foreign currency account. One of these measures is implementation of the penalty on premature withdrawals of time deposits. The penalty is levied if customers ask for their money before maturity of the time deposit. The penalty is considered an addition, which is forbidden in Islam, so penalty amount is not taken into the earnings of the banks (Obaidullah, 2005); the penalties

are treated as charity and are transferred to some NGOs or charitable institutes. Managers in this regard stated that

For people who have fixed their deposits, the bank charges a penalty on premature encashment. If you have booked on 6% rate for a year, and on second month customer asks for money for an urgent payment, then we mitigate it; if he was given 6% rate, it goes down to 2%. So customers think that loss is incurred and maybe that much profit could not be ascertained from there, so leave it (withdrawal).

With regard to penalties, it was elaborated that a penalty is necessary under state bank directions and in case of early withdrawals as one banker put it, the customer is actually ‘breaking the contract’ and he has to feel consequences of this. So, the amount of penalty is given to some charitable organization. As one banker said,

Some people want to exit early so they have to pay a penalty, but in our case, Islamic banks, there is no penalty. Where any penalty arises under the directions of state bank we give it to charity.

Apart from early withdrawals, there are liquidity issues pertaining to foreign currency accounts. Foreign currency cannot be kept in a bank in an excess quantity and there are State bank restrictions as well, which ensure that banks refrain from hoarding foreign currency. The foreign currency accounts are to be reconciled with the state bank on a monthly basis. As one banker commented,

For foreign currency, there is a certain limit and we cannot cross that. For foreign currency it is on the basis of availability. We do not give required cash immediately ... the customer has to inform us two days prior to withdrawal if the amount is large. And by large amount I mean it could be 10,000 dollars.

So, liquidity management on foreign currency accounts and time deposits is more stringent, where the customer has first to request the money and then the money is arranged and paid to the customer (Gentili, 2013). These things are managed on the basis of policies and such policies are already prevalent in the market. Further, it was also stressed by the managers that withdrawals from time deposit accounts are random and arose from an emergency need; otherwise customers do not withdraw the amount. One of the interviewed Islamic bankers suggested that,

People needing money for something does not happen in majority of cases. Chances are rare. The contract is not broken unless he has some urgent need then it happens. And customer waits; even if he has need of money and some time is managed then he waits until the maturity to encash it.

Thus, there are no haphazard cash requirements for the Islamic banks working in Pakistan. Both formal and informal liquidity management mechanisms are relied upon and things go smoothly most of the time. There are certain emergency means to tackle liquidity issues. Like when in need cash could be arranged from other branches or other banks and lower liquidity also force the bankers to seek more deposits from the open market. Such measures are also taken by other banks in international scenario (Duygan - Bump, 2013). One banker in this regard stated that,

We have deposits of 100 million, so we can do 50 million financing on that. From 100 million we can invest 50 million in the market ... 75% means that immediately bank has to strategize, if we have invested 75 million and we only have 25 million we have to decrease this ratio. And those indicators are like for example we have 60 billion and we have invested 50 billion and our consumers still are demanding home loans, car loans or any other type of financing. So we have to see that either we go for it or not? If we go for it we have to boost our consumers, so that you pick up money speedily so that we can invest out there. For example, you are our customer and have limit of 10 billion. You have already spent 4 billion, a big order came up and you want to spend that 6 billion as well. We are on 50 billion and if you use that we would be on 56 billion so we would rush towards our consumers for deposits even if it is a bit expensive. So we see our liquidity issue like this.

So banks seem quite resourceful in context of management of liquidity, they have both short-term and long-run perspective. They have systems to manage liquidity-related issues. These systems are formal and informal and the whole banking system formally or informally supports these systems. There are also emergency mechanisms which could be utilized in intense situations like taking money from the market or from the depositors. Some bankers also opined that banks could also opt for share or bond issues, while in need, as indicated in the following statement of an Islamic banker.

If there are certain banks facing liquidity problems, then they go for IPOs, or issue some shares like Arif Habib has shares, they also issue bonds, either they go to IPOs or issue bonds.

But this would happen in extreme situations, most of the banks are very large in size and others have strong investors, so it might be less likely that these banks would fall into some serious liquidity problem (Qureshi & Sheikh, 2012). An Islamic banker also indicated this by saying,

Mostly, in Islamic banking there are solid parties involved, so they do not have capital requirement problems. More or less you see Askari do not need money, Dubai Islamic bank is the largest bank of Middle East or even world's largest bank. They have assets in trillions. Same as Faisal bank if it gets converted, they also do not need it, Al-Falah bank, UBL, Allied bank do not need it. So, there are no liquidity problems.

So Islamic banks are also quite strong in terms of having strong investors, which might bailout the banks in case of liquidity problems. Lastly, bankers also indicated certain problems that make it hard for them to manage their liquidity; these problems were related to intense competition in the market (Hafeez & Muhammad, 2012) and a new array of taxes levied by the Government of Pakistan. They stated that,

The largest issue nowadays in the market is related to the Tax, it was not levied before, people have started withdrawing their cash and started investing in properties or started keeping it in lockers, bonds of 10,000 and notes of 5000 vanished from the market. People have started keeping that in lockers. Property has increased rapidly because people have withdrawn money even from current accounts. People think that they should invest in property as they are not receiving anything and paying taxes... If he had 10 accounts now he has 5 and soon there will be two accounts. What I see in the future for the banking sector, in the end there will be five or six

big banks in Pakistan, the remaining would be merged with them. Because as of now competition is getting tough, customer is making demands because he knows that if this bank would not comply another bank would.

So a point could be made that not only an effective formal liquidity risk management system is in place in Islamic banks of Pakistan, but also there are other informal mechanisms and other supports that ensure that banks do not face liquidity-related issues. Even SBP has a stringent risk management procedure in this regard, not to mention the customer preference to shift to Islamic banks, which adds liquidity to the Islamic banks in Pakistan.

6.1.1.4 Bank structure

In addition to other questions, bankers were specifically asked as to whether they have a formal risk management department or not. The respondents indicated that a formal risk management department existed in the Islamic banks of Pakistan, but the focus of the department was more on credit risk assessments. A banker stated that

Every bank has got its own risk department. The responsibility of which is to mitigate risks related to deposits and financing. Every case is forwarded to them. Branch prepares the case, like you come to us saying that you need financing so we would prepare the case, we will do your 'know your client', we will see your source of income and after seeing your earnings, so firstly we will do your pre-scanning and if you are eligible then that goes to the risk department.

Further, it was also proclaimed that Shariah board also directs banks as to where the bank could invest or finance. Shariah board decides as to whether the option is in accordance with Islamic principles (i.e. halal or not), as one banker highlighted.

Our Shariah board does not let us to invest or finance in any non-Islamic thing. We send credit appraisal of many cases to Shariah but they do not approve some on the basis that they are not Islamic. They forbid us.

Although interference of Shariah board does not have any direct impact on the liquidity management of the bank, it indirectly restrains Islamic banks from investing in certain businesses and securities. Speculation and gambling are considered haram in Islam (Salamon, 2015); thus, banks are not able to invest in high-risk ventures, the loss of which could raise problems for the bank and its cash flows. Islamic banks cannot invest in debt-based options and cannot charge interest, which makes cash flow of the bank more certain; Islamic banks invest mostly on a profit-and-loss basis and profits or loss amount is relatively uncertain (Basov & Bhatti, 2014). So it is of imperative importance that a bank invests in ventures that are not high risk and the Shariah board ensures this. The organizational structure of Islamic banks in Pakistan is also supportive of risk management where not only a formal department exists for management of risk but a Shariah board prevents the bank from investing in high-risk options (Wardhany & Arshad, 2012).

6.1.1.5 Marketing

Marketing is considered an important aspect of the banking industry in Pakistan. Effective marketing is considered key to the accumulation of deposits in the bank and deposits are a major aspect of any bank's liquidity management process. So various aspects of marketing were sought from the bankers and their responses are discussed in this section of the analysis. The analysis of the qualitative data indicated that Islamic banks primarily utilize the Islamic image of their bank as a differentiating factor, due to which a customer is attracted towards these banks (Awan &

Bukarik, 2011). Apart from that, conventional market tools are also used to lure in customers. Both of these two aspects of marketing of Islamic banks are highlighted in the following discussion.

First and foremost, the response of the bankers highlighted the fact that banks are moving towards Islamic banking. One banker explained that,

Every bank has opened an Islamic window because mostly customers are coming towards Islamic banks. They are that dissatisfied with conventional banking, simply, when you are getting something better you will choose that. See it is written in the Quran about interest clearly, that it is forbidden.

This indicates that there exists a demand for Islamic banking in the market and even conventional banks are moving towards Islamic banking so as to exploit the opportunity. Further, being an Islamic country, the Shariah bench of the Supreme Court of Pakistan has passed verdict to convert banking system on Islamic principles as soon as possible (Ali, 2015). So it is not only a customer requirement, but also a regulatory requirement that banks move towards Islamic banking. Another banker in this regard iterated that,

In the recent past, Islamic banking concept has evolved. The time will come, within a few more years, like 4 or 5 years or within ten years, banking would convert into Islamic. Response is good. People are taking interest. See people who have tasted interest, they are not refraining from it. And people who do not have awareness, if told, they are immediately compelled to opt for it (Islamic banking). Now state bank is only issuing Islamic licenses. Conventional licenses

are stopped. You will see that all banks are moving towards Islamic banks. Opening Islamic windows, MCB, HBL and even National bank has done this. Bank Al-Habib, all have done it. They are coming (towards Islamic banking) and slowly would come to this. In Pakistan, the largest Islamic bank is Meezan, after Meezan is our number. Now slowly everyone is coming towards it.

The growth of Islamic banking in this context is commendable, the concept has evolved in the last decade and now the Islamic banking segment of industry is witnessing growth above its conventional counterparts (Najaf & Ashraf, 2016). According to one banker,

Islamic banking was on 2% then rose to 6% and now in the last two or three years it has captured almost 30% of the banking sector market share. People are coming and depositing their amounts. Customer base is improving, people are getting knowledgeable.

The main differentiating factor for Islamic banks is that they operate under the Islamic tradition and conform to Islamic ideology and principles. This could be termed the biggest competitive advantage of the Islamic banks, as the main competition of Islamic banks as of now is conventional banks. People are automatically attracted towards Islamic banking. This was indicated by a banker:

Basically, customers are already convinced that we have done too much conventional banking and when we have a better alternative, why should we go for that. Here everything is responsibly

of 'Mufti Saab' ho has declared 'Fatwa'. So the liability on the head of the customers is eliminated as they have chosen the better.

Thus, people prefer Islamic banking as they think that it is consistent with Islamic ideology and principles and people are more satisfied with Islamic banking (Khattak, 2010). One banker explains that it basically is “peace of mind” that attracts a customer towards Islamic banking. The banker noted that,

So due to concepts and Islamic principles people have peace of mind. If there are some shortcomings in the products, the rate is less or we are deducting more charges, even then response is good due to peace of mind.

Bankers also try to exploit this factor and they elaborate the difference between Islamic and conventional banks and in this regard they try to locate people who prefer to have a current account with the bank, as there is no interest on such accounts. Islamic bankers try to convince such customers in the manner described below,

You meet so many people who say that we have opened a current account in a conventional bank, so we do not take interest. Actually these are the people; we also targeted these people as this is our target market. We tested how successful our product is on these people. When we met these people we got the same response, we convinced them that they are promoting conventional banking more. Because someone who deposits an amount in a conventional bank and receives interest, he at least damages them, you by giving the money are saying that you earn it and are promoting conventional banking. So we were also successful for this target market.

By and large, the Islamic factor is the main factor which attracts a lot of people towards Islamic banks (Khattak, 2010). Even conventional banks have realized this and they are also trying to expand their business in the Islamic segment. Customers automatically are attracted towards Islamic banks and the bankers try to convince people to adopt an Islamic way of banking. This strategy is paying off and Islamic banking is spreading in Pakistan. A banker concluded with a final note of the strategy of Islamic banking,

Our marketing strategy is that we do purely Islamic banking, so we try to explain our products which are designed in accordance with the Islamic principles. Our strategy is also that we tell individuals that the same thing is available in Haram and Halal mode.

First, the basic strategy of Islamic banks is to utilize Islamic name and image of Islamic banks in order to attract people. This attraction leads towards a better customer base, which ensures that banks have more deposits and are ultimately more liquid. Second, Islamic banks also utilize conventional marketing tools and techniques to promote their banks, their way of banking and their products and services. They not only have a sales marketing department, but also utilize conventional media marketing tools. This was highlighted by bankers in the following words,

Banking is a complete industry and in there, there is a sales marketing department, which is wholly solely responsible for promotions of the products and services, particularly those which are different from others. Through these they attract customers and then they have more business.

The bankers also recognized the value of conventional media marketing and stated that,

Things that are highlighted are sold, this is very easy. There are electronic media and many other tools, which they use for their marketing, and then there is a sales and marketing department.

The competition in the market compels Islamic banks to utilize aggressive and conventional market tools like print media, social media and digital media. A strategy famous in the Islamic banking sector is to use direct marketing, where a customer is contacted directly and is convinced to use the service of Islamic banks (Kamarulzaman & Madun, 2013). One of the bankers interviewed stated that,

You need to go to door to door to make people aware and then the internal thing or desire to be religious, when we touch that, people definitely get attracted towards us.

Bankers also highlighted the need of direct marketing in the era of competition and stated that, *Every player has got its own share. There are investment banks, mutual funds etc. So, one customer is being touched by 50 people.*

One banker in this regard compared customer with “spoiled child” who requires door-to-door services. Other bankers stressed the importance of personal relations and references in context of increasing competition in the banking sector of Pakistan. One banker explained the need for personal relations or referrals in the following words,

We belong to marketing staff. We say that we come on the liability side. Banks nowadays count on references. The better and stronger the reference, the more beneficial it is. This is the reason

every bank has hired many marketing staff. There was a time when banks were going good, but now without marketing staff a bank is not successful. Even big banks like HBL and National banks have also come to this (marketing). So funds are totally based on our relations, now customer acts like a spoiled child and they require door-to-door services. The bank successful in this survives. The staff makes sure that customers do not face any inconvenience. We provide them door-to-door service. If you are my customer, I have a relationship with you. You do not have anything to do with bank you have relationship with me. The better this relation, the more satisfied you would be with the bank, otherwise you would switch.

The importance of references and personal relations could not be undermined as referrals ensure success of deposit generation (Awan & Bukhari, 2011). The stronger the relationship, the greater the ability of a banker to pursue the customer and bring a deposit. The trust factor is very important (Amin *et al.*, 2013). Islamic banks are new in the market and customers generally have a higher level of trust of conventional banks due to their age and financial strength. It was pointed out that Islamic banks could improve their services as better services lure more customers,

There are larger banks, whom customers trust blindly. MCB, Allied, UBL, National bank. Customer does not see whether it is an Islamic bank or a conventional bank, if it is a bank of government, it is going to stay. So customer goes to them and how can we lure their customers if they provide services. We do not have that level of branch network nor do we have products of that kind and we cannot quote those rates. In those banks, customers do not get services, so what we offer is services and by means of these services we increase our cash base.

So better services could also help banks to lure more customers (Hafeez & Muhammad, 2012) and maintain a better liquidity position. Apart from services, product development is also presumed to be important in the banking segment as one banker iterated that,

In strategies, services come first and then there are your products as well. We are building attractive products. Your different types of products are actually almost the same, there is a little bit variation.

Lastly, better products and services also build a good reputation for the bank; existing customers provide positive feedback to others about the bank and thus the customer base of the bank increases. A respondent highlighted that,

The basic thing is promotion or word of mouth. Mostly you go to a customer and provide him with information. The customer nowadays is educated, he does research and goes into detail, then things are discussed with you, there are arguments, justification, then he tells other people. Word of mouth you may say is more effective than marketing or promotion, it is better that you opt for word of mouth, what a customer says about you to others.

So it could be argued that Islamic banks use multifaceted marketing (Kamarulzaman & Madun, 2013), whereby the main focus is on the Islamic image of the banks, which is used to attract customers. In addition, other conventional marketing mechanisms, like formal marketing department and staff, direct door-to-door marketing, personal relations, media marketing, referrals, product and service development and word of mouth are used to increase customer and

deposit base of the Islamic banks (Kamarulzaman & Madun, 2013). All of the marketing initiatives are directed towards bringing more deposits to the bank. The basic competitive edge of Islamic banks is their Islamic image (Osman et al., 2015). But there are certain issues with regard to the Islamic image of the banks, there are people who argue that Islamic banks are Islamic and other groups take the position that Islamic banking is just a disguised form of conventional banking. The following section provides analysis of these two views.

6.1.1.6 Islamic image of Islamic banks

There has been hot debate on the exact nature of Islamic banks. There are some people who think that Islamic banks are Islamic while others disagree. This part of analysis provides the responses of the bankers in this regard.

Those who claim that Islamic banking is actually Islamic point towards the fluctuating nature of profits, procedure, the ways in which the transactions in Islamic banking are conducted and the role of Muftis. First and foremost is the fluctuating nature of profits about which one Islamic banker argued that,

Difference is, in conventional banks, you fix deposit your amount, they say that they will give you 1000 after one month and 1000 means they would give you 1000 but Islamic bank is based on profit and loss, we will not say to you that we will give you 1000. It could be 1100 or 900; it means the amount varies. We do not provide you anything fixed in writing. Likewise everything is different.

So, the amount of profit varies and it is based on the profits earned by the bank on its various investments (Hassan et al., 2013). Interest on the other hand is fixed and conventional banks tend

to offer a fixed rate of interest, which is forbidden in Islam. Other differentiation according to the Islamic banker is in the way transactions are performed in Islamic banks. The bankers argued that the basic documentation is different, for instance one banker explained that the money you deposit in a conventional bank is like an *Amanat* and banks cannot use it, while Islamic banks take money as a form of investment or debt, which could be utilized further for any business. The other differentiation is explained as,

All the banking is alike (Islamic or conventional) and apparently it seems all alike. A normal person cannot discriminate, he would say you take cash and they take cash as well; you finance car and they also do that so what is the difference. Change is in basic documentation, second is the way which is changed. We would not hand cash over to you for anything, you say I want to purchase a mobile, give me the cash, we would not give you cash for a mobile, we would purchase a mobile and sell it to you (Murabaha that is). Cash handling would not be involved.

Another banker explained that they use different words and procedures:

We use word 'tijarat' (trade), we use word of lease instead of financing, we use word of rental or partnership and our products are defined like that. These are the things; you would not like to go to the individual products, so these are our products.

All of these seem to be the juggling of words, but bankers explained that there is a huge difference as one banker coined the difference by stating,

I say to you that interest is purely Haram, let me define it clearly to you, that 'Nikkah' and 'Zinnah' are two different words, but in Nikkah when you write and sign, it's your responsibility.

Thing is the same, you just proceed with the legal way. Just like that you see the same system that there are boards showing Islamic banking, there are cash counters but our wording is changed.

Thus, the major opinion in this regard argues that Islamic banking is Islamic as the profit fluctuates and it is not fixed and there are changed words and procedures which make the whole system Islamic. As stated by one banker, they cannot invest in forbidden projects, products and companies as Islamic banks do not invest in the stock market and they cannot finance ‘Murree Brewery’. Lastly, it was also indicated that there are Muftis, who assure that all products, services, procedures and investments are Halal (Wardhany & Arshad, 2012). The credibility of Muftis was indicated by a banker, who elaborated,

I was surprised and this was an interesting thing, for these ‘Muftis’ are specialized from certain institutions. Like if you want to do MBA there are institutions for that, for example if anyone is going for master’s degree, there is ‘Lahore School of Economics’ or ‘Lums’. Likewise for specializations of Muftis, there are special institutions and to declare a ‘Fatwa’ you need to study for 30 to 35 years and when a mufti explains and develops something, most of the people say that Islamic and conventional banks are one and the same things, but when mufti develops something he has studied that for 30 to 35 years and after that he is declaring the Fatwa. So that means when he has 35 years of knowledge on Islam, we cannot say on our one year or so knowledge that Islamic and conventional banking are the same. So by looking at these things they have developed Islamic banking products.

So, the product development and investment strategy of banks is guided by Muftis and these Muftis are considered experts. Muftis back Islamic banking and its products through their 'Fatwa'. This fatwa relieves Muslims of their doubts and if there remain any non-Islamic content in the product development, the blame is on the Mufti not the consumer of the product.

In addition, there were some doubts about the mechanism of Islamic banking. For example, one manager related that,

Sometimes we get extra rates approved from our senior manager but it depends on the amount.

If the profit is not fixed and to be determined on actual incurrence of profit, how consumer having more money could be allowed to have extra rate of profit? This notion causes doubt on the Islamic banking system and mechanisms. Further, Islamic banks were also giving rates according to the market norm and their rate is based on Karachi Interbank Offered Rate (KIBOR). Another banker iterated in this regard that,

See, there is a rate KIBOR, the rate which comes from Karachi, bank offers some ratio above this rate to its customers. We offer 5%, 5.5% above KIBOR, so cumulatively it turns out to be 11%, 11.5% and it is market norm.

Some bankers themselves have doubts on the status of Islamic banking and one of them argued that,

Banking is interest based, without interest there is no banking. It is wrong to say that interest is in conventional banking not here. Interest is also prevalent in here (Islamic banks) and in there

(conventional banks). The difference is that there it is fixed and here it is not fixed. Here it is floating rate. It fluctuates high and low. This is the reason on which Islamic banking is operating.

So there still exist some doubts as the rate is predetermined and some Islamic bankers are not very clear on the status of Islamic banks. Thus, there were also indications that bankers were not able to guide people in an appropriate manner. Some customers also have doubts on the status of Islamic banks, as one of the bankers stated,

There are customers who think that everything is alright here, some think that something is good and others think that things are the same.

Managers also indicated that sometimes they are unable to convince and guide people in an appropriate manner,

We definitely are not able to guide people like he could so we show Fatwa to people and in many things you go on Fatwas that what responsible people have said. You have to follow and leave your perception as it then goes wrong.

So there might still be issues relating to the conception and understanding of Islamic banking and things could be improved by training staff as to how they should deal with customers (Dusuki, & Abdullah, 2007), particularly problematic ones. A better outlook and awareness of Islamic banking could lead towards better customer response and, ultimately, the liquidity of the Islamic banks could further be improved, while doubts about the conception and a misunderstanding of

Islamic banking could harm the prosperity of the Islamic banks, such that the liquidity position along with the profitability of Islamic banks could be compromised.

6.1.1.7 Comments

Overall, the opinions given by the bank employees in the interviews indicate that Islamic banks have much growth potential in the market (Ali, 2015; Najaf & Ashraf, 2016). Liquidity of banks is related to balancing their cash inflows with their cash outflows and in order to better manage the liquidity, more focus is levied on bringing deposits into the banks. Further, SBP have established capital and liquidity reserve requirements in order to ensure that the financial sector does not face any serious liquidity crunch or default (Ali, Akhtar & Ahmed, 2011) and SBP also supports Islamic banking in the country. There are both formal and informal mechanisms to manage liquidity in Islamic banks, where each branch maintains certain levels of cash and the remaining cash is sent to the head office. The cash requirement is determined through past practice and experience. The customer is encouraged to intimate for large withdrawals and a close relationship is maintained with the customers (Awan & Bukarik, 2011; Munir & Lodhi, 2015), so that bankers are aware of any cash demands from such customers. Islamic banks also charge certain penalties on early encashment of time deposits, although this penalty goes to charity (Obaidullah, 2005), which provokes the customer to not withdraw the amount until its maturity. Further, these early withdrawals are need based and scarce. There is also indication that a bank invests in assets of differing maturities, which also helps the bank to remain flexible. Bankers further stated that large transactions are not cash based, checks are used in this regard, which eliminates the need for money. Banks can also arrange cash from other branches and banks in the case of need, and, when cash is short, banks try to aggressively pick the cash from the market and customers are also asked for deposits (Munir & Lodhi, 2015).

Bankers also opined that banks have the option to issue shares or bonds in case of cash need, which is not required in the case of Islamic banks, as Islamic banks operating in Pakistan have strong investors. Bankers also indicated liquidity-related problems like competition and implementation of taxes, which are hindering the liquidity of the banks (Hafeez & Muhammad, 2012). Banks were also found to have a formal risk management department and Shariah board also prevents the bank from investing in more risky options.

As deposits are considered a major aspect in the liquidity management of the banking sector, various marketing-related aspects of the banks were also explored. It was found that Islamic banks are witnessing commendable growth and customers are attracted towards Islamic banking (Ali, 2015). The main differentiating factor in this regard is the notion that Islamic banks conform to Shariah principles and ideologies. Further, banks also used conventional marketing procedures like using print or digital media, direct door-to-door marketing, utilization of personal relations and references, relying on word of mouth and product and service development. This multifaceted marketing strategy is considered one of the major drivers of success in the banking sector of Pakistan (Awan & Bukarik, 2011; Kamarulzaman & Madun, 2013). The Islamic image is considered an add-on which encourages the customer more and is coupled with superior customer services; this has become a major competitive advantage of Islamic banks in Pakistan (Jamal & Naser, 2003).

There still is confusion as to whether Islamic banking is purely Islamic or not. Some people think that Islamic banking is Islamic due to Muftis in Shariah board, fluctuating profit rates and the way it is preceded. Others doubt because things are based on KIBOR in Islamic banks and there

is presence of interest. These things are aggravated by the inability of the Islamic bankers to provide satisfactory guidance to their customers. So, sometimes customers are not convinced. These things could be improved and Islamic bankers could be trained better to deal with customers who have issues.

6.1.2 Analysis of Islamic banks' depositors' interviews

This part of the analysis provides the analysis of the Islamic bank depositors' interviews. A detailed investigation was made on product offerings, product usage, conception, satisfaction and status of Islamic banks. Further, depositors' preferences and awareness of the marketing mechanisms of the Islamic banks was also sought in order to uncover the liquidity-related aspects of Islamic banks in Pakistan. All of these aspects of Islamic banks are elaborated below.

6.1.2.1 Islamic banking products and usage

The first information sought from the depositors of Islamic banks was related to the availability and usage of Islamic banking products. Better product range and more usability breed liquidity within banks and vice versa. It was found that Islamic banks offer a wide range of products from current account, fixed deposit account, Ijarah financing (home and car financing), products based on Mudarabah, Musharakah, *Bai Muajjal*, Istasna and diminishing Musharakah along with related services like check book issuance and online services (Ahmad & Haron, 2002). Products of Islamic banks are considered Islamic or 'Shariah Compliant'. It was explained by a customer that,

I have an account in an Islamic bank but I have also visited different Islamic banks like two or three banks for information. They were giving the information that they are giving cars and

homes along with motor bikes and they do not charge interest thereon just they purchase asset and give possessions not the ownership. The ownership is distributed and customer has to pay the rentals thereon.

So, customers consider that products offered by Islamic banks are Islamic and product range of the Islamic banks is almost identical to conventional banks, just the way or mechanism of operation is different. The products are the same as far as usability of the products is concerned. Most of the customers were using current and/or saving accounts of the banks and some customers were also utilizing car or home financing facility of the bank. Others also showed interest in car financing. Depositors also stated that even if they just have their money in the current account, they would like to go with their Islamic bank for the long haul, as one customer elaborated,

Nowadays I am using current account of Meezan Bank. But in future I want to take car loan so I will only prefer Islamic bank and nothing else ... I am and will be a long-term customer and investor of the bank. I only will use the Islamic banking.

Considering the responses of the depositors, it could reasonably be argued that Islamic banks have a bright future, they have a loyal customer base, which prefer Islamic banking over conventional banking and they intend to use products and services of Islamic banks for the long run. This is also consistent with previous studies, which indicate towards the patronage of the Islamic banks in the modern era (Haron et al., 1994; Ahmad & Saif, 2010; Khattak, 2010).

6.1.2.2 Depositors' conception of Islamic banking

Depositors were probed for their conception of Islamic banking as to what they consider it is and whether they had any information on the conceptual ideologies on which Islamic banking is based in the modern economy. Most of the respondents stated they had a good conception of differentiation between interest and profit. The dominating opinion in this regard was that risk is involved in the profit and interest is the additional amount of return, which is ascertained without participation in the risk. One respondent in this regard explained that,

Basically in interest there is no risk of loss and it is considered fixed. For example, if you have made investment with someone then that person will bear all the losses and you only have to enjoy the profit i.e. interest. But in profit there is equal chance of loss, i.e. you will gain profit and there will be equal chance of loss and you have to bear that loss as well.

Some respondents also demonstrated a very good understanding of interest and its mechanics, for example,

Literally, riba means 'increase.' However, riba is commonly translated into English as 'interest'. Riba is mentioned in the Quran. Most commentators agree that riba is a sum of money a lender claims from a borrower on top of the principal amount of a loan, as a reward for extending the loan, or for allowing more time for repayment. It does not matter whether the additional amount is small or large; even the smallest amount is still riba because it constitutes an addition. The basic difference is profit is where there is a commodity on at least one side, and interest is where there is money on both sides. So you can't take money for money with extra. Similarly when

two commodities are of similar nature and they are sold by weight or measure then when exchanging them, any extra will be interest. E.g. rice, wheat, dates, etc.

Thus, there are people who understand the conceptual context of Islamic banking and such customers support Islamic banking over conventional banking and are easily able to differentiate between Islamic and conventional banking (Haron et al, 1994). As one respondent stated,

Conventional banks deal with interest and Islamic banks deal with profit. Now why is it so, I will differentiate between Islamic banking and conventional banking. The main difference between Islamic banking and conventional banking is that Islamic banking is focused on asset-based financing and conventional banking is based upon money as a commodity. Once again I would say yes of course the Islamic banking operations are based on profits. Again yes this is practically happening. There is no doubt that the Islamic banking Shariah board members are very strictly evaluating this aspect and they do not approve any financing if they are not satisfied according to Shariah applicability. The Islamic bankers cannot float any financing until and unless this is approved by the Shariah board members.

There was also indication that respondents who have more religious knowledge have better acceptance of Islamic banking, as these individuals are better able to understand the mechanism and implications of Islamic banking. Hamid and Nordin (2001) in this regard recommended enhancing awareness of people on Islamic finance. One respondent, who had knowledge of *Fiqh* showed more inclination towards the understanding and acceptance of Islamic banking. The individual explained that,

I know Fiqh and preaching of Islam. A common man says that Islamic banking is the same banking as commercial banking only words are changed but Islamic banking is real Islamic and common man doesn't know the Fiqh and preaching of Islam. Common man is ignorant. I can also give you an example. Prophet Muhammad (PBUH) said that one Kg of fine quality dates cannot be bartered against three Kg of low quality dates. So one person has fine quality dates which cost Rs. 100 and another person has low quality dates which cost Rs. 30 per kg. Now the fine quality dates holder will say to other person please give me one Kg dates of Rs. 30 and in return the low quality dates holder will say to other that you also give me dates reflecting the same cost. This transaction is Halal because it is properly measured on monetary grounds but the barter system is not Halal. Actually the people do not know such type of facts. If you look into history the Non-Muslims were also at the point that Bai and Interest are the same things but Allah has made Bai Halal and has forbidden us to take interest.

This individual showed a high inclination to use and understand Islamic banking and related mechanisms. Thus, it could be argued that depositors know about interest and profit and they also know that interest is 'Haram' and profit is 'Halal'. Further, people who have better religious knowledge, have better conception of Islamic banking.

There were some depositors who had a poor conception of Islamic banks. The primary reason for this was confusion, whereby it is presumed that Islamic and conventional banks are the same and Islamic bankers are also not able to satisfy the customer on the difference between Islamic and conventional banks. There exists confusion according to the depositors, as one depositor stated,

In my point of view the word interest is replaced only with the word profit in Islamic banks. Now the question is HOW! In conventional banking the banker says that you should invest this amount and you will get this much percentage of mark-up i.e. interest, but in Islamic banks they say that you will get the profit and you have to share the loss as well. But they don't clarify that loss or profit. Give me an example of profit and loss.

So some customers argue that the nature of profit and loss is confused and there is actually no possibility of loss in Islamic banks. Some depositors think that profit actually is interest in disguise and it is actually based on KIBOR. One depositor in this regard argued that,

I don't have a very clear understanding of interest and profit but I have a saving account in Burj bank and every month they give some amount which is considered useful to us. Such amount is of profit but it is at KIBOR rate so actually it can be called interest. If I am not wrong it is based on KIBOR rate and when such rate is applicable then of course profit or interest is generated.

So, many depositors do not understand the implications and mechanisms of Islamic banking. Depositors also do not seem to have much awareness of Islamic banking and they blame Islamic bankers in this regard. A depositor elaborated that Islamic bankers do not actively elaborate the difference and they also are not able to satisfy the depositors in this regard as stated by one depositor,

Frankly speaking I must say that I haven't seen any Islamic bank that can guide customers correctly and convince them that such products are in accordance with the Shariah or not. The

bankers must inform what these certificates are saying. Unfortunately our bankers do not know the Shariah-compliant product rules and regulations. When we ask them whether Bai Muajjal is operating here they simply say that we have to check whether we can provide you or not. In this way a customer can observe the black area that the employees themselves do not know about the products.

Thus, Islamic bankers were found to have superficial knowledge and understanding of the Islamic products, which confuse customers. The perceptions of the bankers although are good, but they themselves are not much aware on the underlying principles on Islamic banking (Shah *et al.*, 2016) There are conflicts in the statements of the Islamic bankers, for example,

The bankers only know the information which is discussed with them at the time of their appointment but if detailed discussion is made with them then they answer less. This is because they have some orally learned sentences which they tell to all customers i.e. we have Shariah board, we do not give interest but give profit, we share profit and loss both, we share risk as well etc. and when you say to them that I want to invest two million and tell me the rate then they will tell you the rate as well, then if the rate is fixed and they have told that rate then where is the Shariah standing in Islamic banks.

Thus, there were repeated indications that Islamic bankers do not have credible knowledge or information to discuss Islamic banking in detail with their customers in order to satisfy them. This situation is quite bad for the Islamic banks as Islamic orientation could be a major strength of Islamic banks (Osman *et al.*, 2015) and if a banker does not understand the conception of

Islamic banking, how could he lure the customer towards it. Thus, there is a serious need to consider that promoting an Islamic image of the bank would enhance the deposits of the bank and the liquidity position of the bank would be strengthened.

6.1.2.3 Islamic image of Islamic banks

Customers were asked whether they think Islamic banks conduct Islamic-compliant operations or not. Mixed opinions came up in this regard, where some depositors opined that Islamic banks are Islamic and others did not share this opinion. Those who think that Islamic banks are really Islamic, support their argument with the role of regulators like SBP and role of Muftis and Shariah board. Those who do not think that Islamic banks are really Islamic, indicate confusion, lack of disclosure and suspicions.

Depositors, who vouch for the Islamic banks stated that SBP impose certain restrictions and conduct assessments to ensure that Islamic banks follow the prescribed rules and regulations and then there is Shariah advisory board as well (Basov & Bhatti, 2014). A depositor thus argued that,

In my point of view certain restrictions are imposed by State Bank of Pakistan and the Islamic bank must follow them, but the authorities and powers the bank owns by itself, in such authorities and powers the bank always follow Shariah Law because they don't make any policy before consulting with their advisors.

Further, it was also indicated that both Shariah advisory board and SBP play their role to ensure that Islamic banks conduct their operations consistent with Islamic principles and laws. One respondent stated,

The Shariah advisory board has a main and important role. They have to give assurance to SBP when SBP do the audit. Without their assurance there is no Shariah compliance.

Then there is role of Muftis, which is much stressed as a guiding and assurance mechanism as Muftis are presumed to have more knowledge and understanding of the Islamic principles and thus are better able to design a banking system which is in conformity with Shariah and Islamic economic principles (Wardhany & Arshad, 2012). Thus, many individuals tend to trust the abilities, judgments and knowledge of Muftis and endorse the notions of Islamic banking. As one stated,

I have discussed with different customers the concept of Islamic banking. They told me that only the products names are changed, the rest is same as conventional bank. Giving a comment is very easy. It is just like that at the time of slaughter of hen, if Takbeer is not said then it will be haram and if Takbeer is said then it will be Halal. Why do people not say that this is the same thing.....! In my point of view the people who have approved the system of Islamic banking are far more qualified and knowledgeable as compared to general customer. If any general customer has knowledge equivalent to a Mufti and then he comment, then understanding is made that he is debating knowledge fully. But in the absence of such knowledge a general customer can give comment but this will not be his research.

There were also notions like “*sin and blessing is on them (Muftis)*”. So, some depositors think that Muftis have better knowledge and they are responsible for any wrong doings in the design

and implementation of Islamic banking and related mechanisms. In this regard, one respondent iterated that,

Generally speaking, I personally know that my knowledge is not equivalent to Mufti and when a Mufti give Fatwa that this is very much in accordance with the Shariah and of course Allah has given him knowledge and he also accepts the responsibility, and such Fatwa is forwarded by an Alam like Mufti Taqi Usmani from whose knowledge the Malaysian Banks and other foreign banks are taking benefits, then we have to believe him.

So, the general opinion is that if the State Bank is involved and Muftis are designing and endorsing the banking system, the responsibility of its being Islamic lies with the Mufti and the system is Islamic.

There are also people who are reluctant to endorse Islamic banking as an Islamic system. They argue that there are confusions in the system and Islamic banks also do not disclose on certain things as to where they have invested your money. With regard to the confusion, depositors argue that bankers are not able to explain and satisfy customers on the true conception of Islamic banking. This has already been explained previously. For reference, one response of the respondents is quoted here,

Actually when I opened a bank account in Dubai Islamic Bank, then the manager was Mr. Shahid and there I discussed with him the difference between Islamic and non-Islamic banking

conditions, but he did not satisfy me so I haven't made any financing there nor did I discuss the other terms with him.

In addition, confusion persists on the PLS mechanism as to where the bank invests money of a particular investor and how much profit is earned by that investment and how come that Islamic banks do not suffer any losses or if they do, why are they not shared with depositors. This was explained by a depositor in the following words,

Actually conventional and Islamic bank products are there but are same, only with different names. The Islamic banks have no true spirit because we have not heard from anywhere that Islamic banks bore a loss and such loss is also shared with the customer. If these are true Islamic then why do they not share the loss with the customers or do they (Islamic banks) do such efficient business that they never ever suffer loss.

Depositors also perceive that some products or systems might not be Islamic as the banking system is run on money and funds, the trading of which might be forbidden in Islam. The trust is an essential factor here (Amin et al., 2013) like one depositor elaborated,

I must say that the Shariah law is not fully applicable to the Islamic banks because they all are doing business of money and funds. It is possible that some product represents the Shariah law but I am afraid that all the products are not Shariah compliant ... I have never met with Shariah board members but in GC University our teacher of banking was very experienced and he told us

that he has been advisor of Shariah board in UAE but in his words this all is a bribe and people give deception in the name of Shariah. How much of this is correct I can't comment on.

Another respondent also explained this by saying,

Islamic banks are not different from other financial institutions in terms of their legal modalities, constitutive structures, objectives and means of achieving those objectives. The only difference lies in their description as Islamic.

So individuals perceive that Islamic banks are not that Islamic. Some respondents also indicated a lack of disclosure from Islamic banks. This again confuses the customers of the bank. One depositor explained that,

Meezan banker was come to me regarding giving me information about insurance i.e. interest free. They were giving the same information as was written in the court order. In fact the information was correct but the practices are somewhat ambiguous. Basically the differences in practices are that the Islamic banks say that they invest in some business but they do not inform us that what type of business is that. Either this business is Halal or haram. This is main controversy.

Thus, there exists much confusion on the conception, understanding and functioning of Islamic banks. Depositors who still are holding themselves back might be attracted more towards Islamic banks if these confusions were removed and Islamic banks were successful in establishing a true

Islamic identity (Khattak, 2010). This would definitely improve the liquidity position of Islamic banks in Pakistan.

6.1.2.4 Satisfaction with Islamic banks

Depositors were asked about their satisfaction with the Islamic banks in Pakistan. It was found that there are three aspects of satisfaction of the customers of Islamic banks, which are Islamic orientation, service and markup. The Islamic orientation relates to the nature of profit that depositors receive from Islamic banks (Ismail, 2010; Khattak, 2010). Many respondents opined that they are satisfied that they are getting Halal profit because it is fluctuating not fixed and is based on PLS (Beck et al., 2013; Khattak, 2010). Further, some respondents also seemed satisfied with the modes of financing and nature of banking as these conform to Islamic notions and ideology. One of the respondents opined that,

One thought in the back of my mind is that when we use Islamic banking then we will be safe from interest and interest factors, this satisfies me a lot. This is the main reason and they advertise the same thing.

Secondly, depositors were satisfied with the service aspects of Islamic banks in Pakistan. There were various indications that Islamic banks provide better services as compared to larger conventional banks and service aspect of bank is considered a critical success factor (Hafeez & Mohammad, 2012). One of the customers explained,

Of course one major element is of profit sharing instead of interest but other factors that have attracted me are the services offered by Islamic banks. At one time I have bank accounts with

Bank Al-Habib and HBL but the best customer services I have ever received are from Meezan Bank. The attitude of the bank officers is very good. Their behavior is very good. They facilitate you a lot. Really my experience with Meezan is very first class. One more thing is that they are always ready to provide services, if I need check book, bank statements or other services they always cooperate. The most important is if there is any transaction then they always ask whether the bank has to honor it or not, so a security element is also there in Islamic banking transactions.

Banking is a services industry and successful banks try to improve their service quality; that is also a reason why Islamic banks, which are not that old and large in size, have gained so much popularity and success in a short span of time (Hafeez & Muhammad, 2012; Najaf & Ashraf, 2016). So the service aspect of banking is very important and Islamic banks have focused on this aspect of their business to attract customers in addition to their Islamic orientations. Lastly, there was some indication on the profits paid by the Islamic banks. It was noted that Islamic banks tend to pay less rate of return as compared to the conventional banks. But the indication was small and not detailed.

Overall, two important considerations were put forward by the depositors which make them satisfied with the Islamic banks. One was Islamic orientation and the other was service, and customers seemed to be satisfied with both of these aspects of Islamic banks in Pakistan.

6.1.2.5 Why some customers prefer Islamic banks to conventional banks

Customers were further asked as to why they preferred Islamic banks to conventional banks. The most dominating response in this regard was related to Islamic motive, which is a substantial one

(Khattak, 2010). Other reasons also sighted in this regard were word of mouth or reference, business reasons, service reasons and lower costs. The most dominating reason in this regard was Islamic motive. There was a clear indication that depositors preferred Islamic banks due to Islamic reasons. One of the respondents stated a detailed response on this,

Basically interest is riba 'sood' and profit is a more linear term that attracts a Muslim for investment. People generally prefer profit. If they invest widely then it is important for them to use profit from the bank instead of interest. Actually sir I haven't seen in commercial banks any risk-sharing and profit-sharing element. The commercial bank only forward all risk towards customer and bank only need profits. Therefore such banks are only promoting interest. Islamic banks are based on profit-and-loss sharing along with sharing of risk therefore they are not promoting an interest-based culture and profit sharing is Halal in Islam so I have selected the Meezan bank.

Thus, Islamic banks were preferred by most of the depositors because these are presumed to be either Islamic or at least 'look like Islamic'. These banks provide profit and get rid of riba or interest. Secondly, some respondents indicated that they chose an Islamic bank due to some reference, as one respondent explained,

Basic reason for choosing an Islamic bank is that my whole family has different accounts in Islamic banks only; therefore, I prefer Islamic bank only. Secondly its operations look Islamic and are far away from riba, interest transactions.

So, word of mouth or reference might be another criterion for preference of Islamic bank and then there is the Islamic motive as well. People who are not motivated by Islamic orientation could be attracted through referrals, as one of the respondents indicated that,

I had a reference at that time so I have leased a car for my brother-in-law. Instead of this reason I have no other special reason. Also I have not taken it seriously that it is an Islamic bank or conventional bank because interest is charged on both banks' financing i.e. Islamic and conventional.

So, referencing might be the best way to attract people who think that Islamic banking is not really Islamic. Then there were business reasons for which convenience was the main factor, like if the bank is near the business location or if the banks facilitate business payments and receipts etc. Next important factor was lower service charges, whereby depositors indicated that they would prefer the bank with lower service charges. And lastly, service was deemed an important criterion for bank preference. As indicated earlier, banking is a services industry and customers do see service quality in this regard. Most of these aspects are related to the conventional banks as well (Duski & Abdulah, 2007; Munir & Lodhi, 2015; Jamal & Naser, 2003)

Overall, the main factor of preference of Islamic bank over conventional bank was Islamic motive. Apart from that there are other factors like references or word of mouth, business convenience, better services and lower service charges.

6.1.2.6 Marketing

Lastly, it was also probed whether customers are aware of the marketing initiatives of banks or not. The depositors of Islamic banks indicated that they have not seen any effective direct marketing initiative from the Islamic banks and Islamic banks also do not have strategic orientation in this regard. Customers cited awareness as the main concern in marketing and stressed that bankers should take the initiative to make customers aware of Islamic banking and its mechanisms (Khattak, 2010). Depositors stated that,

But the bankers also do not give information of their own, until and unless the customer asks them personally.

Another depositor complained that there is lack of awareness of Islamic banking, which is hindering growth of Islamic banks. The depositor iterated that,

I want to say clearly that religious factors are important but an accurate awareness of Islamic banking products is very much needed. If you say quality, then quality is very adaptive in Islamic banking and more than commercial banks, but the problem is that awareness is not widely spread by Islamic banks. Think of that, if a potential customer, especially a Muslim, does not have awareness of products, then how does the Islamic bank achieve its potential in the economy?

So, the basic marketing motive of the Islamic banks should be to educate the customer on Islamic banking and satisfy him on all of his concerns. As indicated by one of the respondents,

A common man is of the point of view that in Pakistan no bank does not take interest. The very first thing is that the Islamic banks have to do is clear this thing. Secondly they have to commercialize very efficiently and effectively. Thirdly you have to inform a common man how an Islamic bank is Islamic. You have to give a clear picture. Nowadays people know that Islamic banking is going on but they don't know what Islamic banking is actually doing. So the Islamic bank is in darkness. The Islamic banks should work hard on how this system should be enlightened.

Thus, it is responsibility of the Islamic banks and their staff to spread awareness of the products, procedures and prospects of Islamic banks. For this purpose, direct marketing would be most effective as customers are to be provided information and two-way communication is necessary where the customer could probe the matter in detail. Thus, close intimacy and a relationship with the customer should be built and cherished in the Islamic banking segment (Munir & Lodhi, 2015). A depositor stressed the need of a direct relationship between the bankers and the customers by saying,

Knowledge of clients is based on a continuous relation with them which is, to some experts, the most important managerial rule: Success in banking services means the ability to interact with and relate to the client's desires, anticipate her wishes, and offer services that are specific to these desires and wishes.

Lastly, there is another concern that all the Islamic banks attract customers in the same way highlighting that their products and services are Islamic and no differentiation within the Islamic

segment is highlighted. This might work for now when there is potential in the market and customers are being attracted towards Islamic banks. Later on, after the market is saturated, Islamic banks would compete with each other and there would be no differentiation left among them, which would result in aggressive marketing and banks would face difficulties and enhanced competition (Osman *et al.*, 2015). A depositor highlighted this issue by saying that,

As for example if you switch on your TV sets then UBL, HBL attracts you very differently but in case of Islamic banks they only say “Sood Say Pak Banking” and it is not sufficient information for a common man.

So, Islamic banks should consider increasing their customers’ awareness in an appropriate manner and this could be done by training bankers or appointing some *Alim* in each branch, who is able to satisfy the customers on the conception of Islamic banks. Further, there should be some differentiation between Islamic banks so as to have a better strategic orientation and outlook.

6.1.2.7 Comments

The interviews conducted with the depositors of Islamic banks indicated that products and services offered by Islamic banks are almost the same as those of conventional banks (Ringim, 2013; Ahmad & Haroon, 2002) and many customers want to have a long-term relationship with the Islamic banks. Depositors were found to have issues and confusion with the concept of Islamic banks, but people with a better knowledge of Islam and Fiqh had a better conception of Islamic banking. The rest of the people confused profits in Islamic banking with interest in conventional banking. Further, the main reason for confusion was that Islamic bankers were not able to satisfy the consumers on the concept of Islamic banks (Rosely, 2005).

People who think that Islamic banking is really Islamic indicated the role of regulators like SBP and the role of Shariah boards and Muftis to support conformance to Islamic ideology (Basov & Bhatti, 2014), which they perceived to be the responsibility of regulators and Shariah board. People who do not endorse the notions of Islamic banking put forward confusion and conflicts in the mechanisms of Islamic banks and the lack of disclosure in Islamic banks (Harahap, 2003). It was also indicated that many customers were satisfied with the Islamic orientation of the banks and their services (Jamal & Naser, 2003; Khattak, 2010), which according to the depositors was better than large conventional banks. Depositors seemed to prefer Islamic banks due to their Islamic orientation, referrals, business convenience, better services and lower service charges. Lastly, it was also found that Islamic banks are not good at marketing and they do not proactively try to make their customers aware and there are serious shortcomings in this regard. Overall, depositors' responses to Islamic banking were mixed, where some depositors endorsed Islamic banking as Islamic and others did not. There is a serious need to reconsider the marketing strategy of the Islamic banks. Islamic bankers should be trained so that they are better able to satisfy their customers and assure them that Islamic banking is Islamic. Promoting Islamic image of Islamic banks would automatically create demand for Islamic banking products and services and their liquidity positions would strengthen in the long run.

Chapter 7

Discussion and Synthesis

Chapter 7 of the dissertation provides discussion on the findings of the study along with a synthesis of the research. This part of the thesis also provides implications of the research, whereby focus is levied on the compiling of the findings of all three analyses: econometric analysis, survey questionnaire results and qualitative analysis. Econometric analysis considered three models (i.e. liability model, assets model and liquidity reserve model), while survey questionnaire collected data from both depositors of Islamic banks and Islamic bankers in Pakistan, qualitative data were also collected from the Islamic bankers and depositors of Islamic banks. This part of thesis is organized as follows: the first part provides an overview of the findings of the econometric analysis and a discussion, the second part provides a description of the findings of the questionnaire survey analysis and a discussion, after that findings of qualitative data analysis are explained along with implications. Lastly, an overall discussion combining all of the data and respondent types is provided along with the implications concerning liquidity management in the Islamic banks of Pakistan.

7.1 Discussion on Econometric Analysis

Econometric analysis of the study is based on the secondary quantitative data collected from the annual reports of the organizations. The econometric analysis was based on three models: liability model, assets model and liquidity reserve model.

The liability model provides an indication of the depositors' behaviors as it determines the factors that provoke deposits in Islamic banks as ensuring more deposits guarantees that bank have enough cash to pay its depositors in case they call for it (Fiedler, 2000). The determinants

considered in this model are previous year's deposits, RPA, CO and DFR. The second model considered for the econometric analysis was asset model, which investigates the investment behavior of the banks. The dependent variable of this model was investment in operational financing, which was determined through the variables of RPA, DFR, profit from non-operating finances and CO. Lastly, liquidity reserve model investigates the determinants of liquidity reserve maintained by the Islamic banks. The dependent variable of the model was TLR of the bank, which was determined through the independent variables of total investment in all financing, profit from operational financing, %RS and previous year's liquidity reserve.

7.1.1 Results and discussion of asset model

The asset model tries to investigate investment dynamics of the Islamic banks in the context of liquidity management. According to Zhu (2001), bank accepts liquid cash and invests most of it into long-term assets, which are not liquid. This gap could create a situation whereby depositor, who might have short-term deposit horizon, asks for the money, which bank has invested in long term assets and thus could not be redeemed at once. So, such that bank faces liquidity problem (Greenbaum & Thakor, 1995). Random effect model suited the estimated of the asset model, which implied that banks' characteristics are an important consideration in asset management of the Islamic banks. Only variable of RPA had a significant and positive impact on operational financing of the banks; while other variables of DFR, profit from NOP and CO were not considered important consideration in determination of the operational financing investment of the banks. This is consistent the Ismail (2010) and Farook, Hassan and Clinch (2012). This implies that maximization of the bank's return was not considered an important criterion in the portfolio investments of Islamic banks in Pakistan, neither does operating costs. Jaffar &

Manarvi (2011) also reported fluctuating nature of operating expenses in Islamic banking sector of Pakistan. The important consideration with regard to determination of the operational financing investment was only RPA. The positive impact of RPA on investments in operational financing is quite logical as more returns the bank pays to depositors, the more finance would be available to the banks for further operational financing. Ismail (2010) also listed profits among three most important factors that help retaining the customer in the banking industry. This indicates that banks that are able to provide better returns to their depositors would have more money to invest in the operational financings. Ismail(2010) further argued that lower returns in Islamic banks coupled with the higher risk could tempt depositor to withdraw their money. Secondly, profit from NOP also has a positive impact on investment in operational financing. NOP in the Islamic banking represents other revenues earned from different services and from Ijarah financing. Ijarah financing at present is very famous in the Islamic banking segment of Pakistan (Sabir, 2008) and income from these sources is not shared with the depositors and still there are many investors who simply put their money in current accounts (Ismael, 2010). Thus, no profit is paid to the current account holders and in Ijarah financing, no sharing of profit between Islamic bank and depositor is made. This although enhances the profitability of the bank, but is unable to attract more deposits for operational financing. Antonio (1999) in this regard argued that besides liquidity management, a bank has to enhance its profits, which it could by efficient exploitation of its current accounts (Eljelly, 2004), which are not costly but excessive use of this money could create liquidity problems for the bank. Lastly, cost of operations also does not have a significant impact on investment in operational financing. This relationship implies operational costs were not associated with the operational deposits of the banks. This might be due to the economies of the scale. Bank having more money to finance could reduce its operational and

transaction cost by allocating more operational finances to less number of alternatives. This might increase the risk of the bank but also reduce the costs and these costs do not have any relationship to the operating finances (Hughes & Mester, 2013). Islamic banking is in its infancy in Pakistan and conventional banks are well established (Ahmad & Saif, 2010). The market is saturated and Islamic banks have to incur higher costs to arrange for deposits but these higher costs are offset by lower costs on investment activity and things remain in balance.

Overall, the findings of the asset model indicate that satisfaction of the depositors remains a major concern for the Islamic banks as banks sharing more profits with depositors are able to have more investments in operational financing. This is consistent with Jamal and Naser (2003), Khattak (2010) and, Ahmad and Saif (2010). Further, banks could utilize NOP modes like Ijarah in order to increase their profits, competitiveness and optimize liquidity as Ijarah financing is relatively more flexible and returns on this type of financing are not shared with the depositors. Ijarah remains the most competitive product of Islamic banks and it has a wide demand in the market (Sabir, 2008), further the rents on the product could also be tailored to the fluctuating economic scenarios and considering the Pakistani market, problematic Ijarah investments like in cars and homes could easily be liquidated in the market. So, investments in Ijarah are relatively more liquid as compared to investments in Mudarabah and Musharakah contracts and investment in such alternative do hinder the operational financing capacity of the banks (Hassan, & Tahir, 2013). Lastly, Islamic banks are facing intense competition from their conventional counterparts (Ahmaed & Saif, 2010), which forces them to incur additional costs in the course of securing deposits and investing in operational financing, which are offset by the operating costs incurred on the investing activity. This enhances competitiveness of the bank and makes banks more

flexible. So, asset side liquidity management of the banks is primarily based on the variable of RPA only and other factors are not deemed that much important.

7.1.2 Results and discussion of liability model

The liability model provided the implications of the liability side, namely deposits for the liquidity management of the Islamic banks in Pakistan. The obvious thing in this regard is that more deposits imply more liquidity (Diamond & Rajan, 1999). So, enhancing customer base or deposits is considered one of the most important criteria in the liquidity management of the Islamic banks in Pakistan. The first important consideration in the determination of the deposits of the Islamic banks was the variable of RPA, which yielded a positive and significant impact on the total deposits of Islamic banks. The positive sign indicates that as the Islamic bank increases the return sharing, deposits increase. This is quite obvious that more returns attract more depositors toward the bank (Ismail, 2010). Increase in return sharing seems quite good for the return-sensitive depositor, and such investor would try to increase its deposits in the bank (Okumuş, 2005). This indicates that Islamic banks should try to increase return sharing; this would also improve their image as pure Islamic banks in the eyes of the public (Ismail, 2010). Secondly, DFR had an insignificant impact on SD, which implies that operational income, which actually is generated from pure Islamic-based investments like Murabaha, Mudarabah and Musharakah do not influences the deposits of the Islamic banks as such income is not distributed among the depositors under these arrangements (Obaidullah, 2005). This again is obvious and it also helps the bank to increase their profitability and improve their services, but do not do much to attract deposits. Thirdly, CO did not yield any significant impact on SD. And lastly, lag of SD also yielded a significant and positive impact on Islamic bank deposits implying that familiarity,

image or referrals have something to do with bringing in more deposits. Word of mouth and satisfaction of the existing deposit holders is important in this regard (Haron, & Planisek, 1994). This also indicates that an increasing trend is being witnessed in the deposits of Islamic banks, and it is good for the liquidity position of Islamic banks. Eedle (2009) also indicated towards the growth of Islamic banks over the time despite of the financial meltdown in Europe. Thus, there is a strong association of the past deposits with the future ones in the Islamic banking segment of Pakistan.

Overall, RPA has a positive impact on an Islamic bank's deposits implying that Islamic banks should consider increasing their return sharing as it attracts more depositors, particularly depositors who are return sensitive (Ismail, 2010). Secondly, more investments in the operational financing and resultant increased return thereof could not enhance the Islamic bank's deposits and, lastly, an increasing trend could be anticipated in the deposits of the Islamic banks and there is indication that referrals and customer satisfaction would actually lead towards better deposit side liquidity (Awan, 2011). Thus, there is a serious need to improve the return sharing of the Islamic banks and a growing trend could be anticipated in the future deposits of the Islamic banks in Pakistan. This indicates that the liquidity position of the Islamic banks would be better off for the time being and the Islamic banks should work on improving their return sharing to ensure that customers think of them as purely Islamic.

7.1.3 Results and discussion of liquidity reserve model

Lastly, econometric analysis of the study also tried to determine liquidity reserve using variables of total investments in all financing, total profit from operations financing, %RS and lag of

liquidity reserve. It was found that total investment in all financings and total profits from operations do not have any significant impact on liquidity reserve of Islamic banks. Next %RS has a significant and negative impact on liquidity reserve. This might be due to the return-oriented depositors and if Islamic banks decrease their percentage of return sharing, more liquidity reserve might be required in order to ensure better liquidity of the Islamic banks (Ismail, 2010). This indicates that banks either have to pay more percentage of return sharing or keep more liquidity reserve in order to face anticipated cash outflows. This also implies that by increasing percentage of return sharing, Islamic banks could reduce liquidity reserve and this money could be further invested elsewhere (Antonio, 1999). Lastly, lag of liquidity reserve also yielded a significant but positive impact on liquidity reserve. This implies that over time the liquidity reserve of Islamic banks has increased and this is also the case in Pakistan (Ahmad & Saif, 2010). This might be related to the deposits of the Islamic banks as more deposits implies more uncertainties on future cash requirements and thus a higher liquidity reserve would be required in that scenario, and it is seen that deposits of the Islamic banks have increased over time.

Overall, it is found that Islamic banks need to provide competitive profit sharing rates to depositors in order to avoid liquidity-related issues (Ismail, 2010). Lowering this rate could actually bring an increase in liquidity reserve and that could prevent the bank from investing these funds in some profitable venture. Secondly, liquidity reserve has increased over time just like Islamic banking deposits, which might imply that liquidity reserve could actually be a function of deposits in the banking sector of Pakistan (Ahmad & Saif, 2010). Banks should try to

improve their return sharing percentage and bring more deposits in to remain secure on liquidity risk.

7.1.4 Overall results and discussion of econometric analysis

There have been mixed results on liquidity management of Islamic banks in Pakistan. It seems that there exist two types of depositors in Islamic banks. The first type is motivated by higher percentage of return sharing. Higher return sharing enables Islamic banks to increase their investments in operational financing and reduce the need to maintain higher liquidity reserves (Ismail, 2010; Ahmad & Saif, 2010). The implications for this are that banks paying more in return sharing are better able to manage their assets, where not much cash is kept idle and is invested in operational financings and banks are better able to earn higher returns on their operational financings. Non-operational profits come from investment in NOP like Ijarah and other marketable securities. More return on these options indicates that a bank has higher investments in these options. These investments in NOPs are relatively more liquid and thus such Islamic banks can afford to invest in long-term financing options like Mudarabah and Musharakah (Hassan et al., 2013). So, on the asset side, Islamic banks can offer more return sharing to depositors to better manage its assets, while investing more in NOP could only serve as increasing the profit of the bank, not the liquidity of the bank.

The second cohort of depositors has a religious orientation and they tend to deposit their money in a bank in expectation of conducting banking in conformance with Shariah and Islamic principles (El-Din, 2008). Such depositors continue to deposit in the bank and thus, past deposits bring future deposits for the Islamic banks and their liquidity is improved. In order to provoke such deposits, bank has to make sure that there should be no element of Riba in investment

projects of the bank (El-Din, 2008). Further, increased investments in operational financing and resulting increased DFR could only improve profits of the Islamic banks, not their deposits. Operational financing options are related to Mudarabah and Musharakah and there is less confusion with this type of Islamic mode of financing and if Islamic banks invest more in such options, their Islamic image improves, so does their profits. A positive impact of return sharing on deposits implies that more return sharing would bring more deposits for the bank (Ismail, 2010).

Lastly, a positive impact of lag of Islamic banks' deposits on Islamic bank deposits and of lag of liquidity reserve on liquidity reserve implies that Islamic banks are growing over time and their liquidity position is getting better. There surely is some part played by the marketing and service initiatives of the Islamic banks, which not only attract new depositors but also enable the Islamic banks to satisfy and retain them (Awan & Bukhari, 2011). These satisfied depositors further spread positive word of mouth or make referrals and more customers are attracted towards Islamic banking.

Considering the liquidity position of the banks, Islamic banks need to focus on both sides of their balance sheet (Ismail, 2010), where liability side management is quite simple, as an Islamic bank just has to bring deposits to maintain liquidity. This could be done by attracting return-sensitive depositors or depositors with religious orientation (El-Din, 2008). The best strategy would be to clarify the confusion of depositors with religious orientation and bring in both cohorts of depositors. The asset side of liquidity management on other hand is tricky, where an Islamic bank has to balance its portfolio of investments in operational and NOPs, where investments in

operational financing are not that liquid and flexible, but these improve the Islamic image of the Islamic banks and investments in NOPs like Ijarah financing are more flexible and liquid (Sabir, 2008). Then there is liquidity reserve as well, which is not very profitable but is most liquid. So, an Islamic bank has to decide how much of its total money is to be allocated to liquidity reserve, investments in NOPs and operational financings.

7.2 Discussion on Survey (Questionnaire) Analysis

After econometric analysis, a survey instrument (i.e. a self-administered questionnaire) was developed and distributed among both Islamic bankers and depositors of Islamic banks so as to understand the behavioral aspects of both depositors and Islamic bankers. The discussion relating to the survey (questionnaire) is segregated into two parts, whereby the first part discusses the responses of the Islamic bank depositors in this regard and the second part of the discussion provides elaboration of the responses of Islamic bankers. A third subsection presents an overall discussion of the results from the survey.

7.2.1 Results and discussion of depositors' responses – questionnaire survey

This part of the discussion provides an overview of the results sought from the analysis of the responses of the Islamic banks' depositors. The survey administered contained questions about their awareness and knowledge of Islamic banks, reasons for their preference of an Islamic bank over a conventional bank, their Islamic motivation and liquidity-related behavior.

First of all it would be worthwhile to relate that the entire sample had at least an undergraduate degree implying that the chosen sample was educated and was able to understand the complex

context of Islamic banks, if any. Despite this, there was an indication that most of the respondents lacked knowledge and awareness of the usability of Islamic banks and their products. Only 40.7% depositors agreed that they understood Islamic banking operations and Sharia principles. Further, a majority of respondents seemed to be satisfied with the facilities provided by Islamic banks and there was a higher tendency to have profit motive among the depositors.

But, depositors seemed to have good intentions towards Islamic banks, whereby it was implied that depositors wanted to support Islamic banking. After religious motive, the respondents highlighted transaction motive, whereby depositors wanted to have lower restrictions on withdrawals, less costs of services and less penalties on early withdrawals and, lastly, a commercial motive was highlighted which stressed the requirements of services and facilities from the banks. There was an indication of preference for short-term investment over long-term investment. This is also consistent with the previous literature on the subject (Okumuş, 2005; Jamal & Naser, 2003; Khattak, 2010).

Lastly, respondents were asked to rate the reasons for which they might be compelled to close their account and withdraw their money from the bank, which cannot be avoided (Diamond & Dybvig, 1983). It was found that the most dominating reason for closing an account was due to economic reasons forcing the depositor to hold cash in hand. Second important reason in this regard was related to the return on deposits whereby it was opined by the depositors that they would close their accounts (Ismail, 2010), if they would be getting less returns as compared to the interest rate in conventional banks. A neutral response was given to products and services

offered by Islamic banks. The Islamic motive was not found to be important in this regard and depositors opined that they would not close their account if they found that their bank is not Shariah compliant (Awan & Bukhari, 2011). Lastly, respondents also indicated that they are not facing any service-related issues at their current Islamic bank and they seemed satisfied with the return paid by their banks, which is also consistent with the literature (Jamal & Naser, 2003; Awan & Bukhari, 2011).

Overall, it could be inferred that depositors of Islamic banks lack awareness and knowledge of Islamic banking, but they want to support Islamic banking. Apart from supporting Islamic banking, they also want to fetch better returns on their deposits and to have better services (Ismail, 2010; Awan & Bukhari, 2011). Depositors also tended to prefer short-terms investments to long-term ones. Lastly, profit and economic motive were found to have potential to distort a bank's liquidity (Ismail, 2010, Jamal & Naser, 2010). Further, a religious motive might attract deposits towards banks; it would not be able to lure money out of the bank even if the bank is proved to have Sharia-compliance issues. These findings imply that lack of understanding and awareness of the depositors might be the main issue in this regard (Khattak, 2010). If depositors cannot understand the implications and functioning of the Islamic banks, they will not have much trust in Islamic banks. They want to support Islamic banking, but if it is Islamic banking. These conclusions are further strengthened by the dormant responses from depositors to non-Shariah compliancy of their bank (Ahmad & Saif, 2010). Why should they respond if they already think it is non-Shariah compliant? The profit orientation of the individuals is strong and they also seem to prefer better services from the banks. Economic reasons could pose a serious threat to an Islamic bank's liquidity, but to large extent these might not be in the control of

individual banks and the whole banking sector might face liquidity issues, if such a situation arises. Thus, banks should seriously consider educating and making their customers aware of the concept of Islamic banking in order to boost their confidence in Islamic banking (Khattak, 2010). Profit and service orientation could be utilized with the religiously orientated depositors to attract more depositors and sustain a better liquidity position in the banking sector of Pakistan.

7.2.2 Results and discussion of Islamic bankers' responses – questionnaire survey

The second questionnaire survey was administered to Islamic bankers in order to provide a practice-oriented overview of the liquidity management in Islamic banks of Pakistan. Two aspects in this regard were sought from the Islamic bankers: organizational structure of banks and liquidity management practices used in Islamic banks of Pakistan.

In terms of organizational structure it was found that almost all of the banks had a risk management department/division with some specific post of director or manager responsible for liquidity management (Kanwar, 2005). This indicates that banks take liquidity management seriously and there are formal arrangements to plan for and manage liquidity risk. Further, it was also found that Islamic banks coordinate with SBP for liquidity risk management and follow directions of State Bank for liquidity management. This further minimizes risk taking by the individual banks which could compromise their liquidity (Akhtar, Ali & Sadaqat, 2011). SBP has reserve requirements, which are to be met by individual banks, and this ensures that every bank in the banking industry of Pakistan remains liquid. Strict regulation of SBP in this regard has prevented Pakistani banking sector from being affected by the liquidity crunch faced by the world in the latter half of the last decade (Arif & Anees, 2012).

Further, it was also indicated by the respondents that Islamic banks of Pakistan have good liquidity management infrastructure. They follow regulatory requirements of liquidity management and have a liquidity management team, which anticipates and plans the liquidity requirements of the banks as a formal mechanism to avoid liquidity-related issues (Iqbal, 2012). Further, an extra cushion is also kept above the reserve requirements to remain flexible on liquidity management. Apart from that there are other formal means to manage liquidity of Islamic banks which include customer relationship management in order to assess their cash requirements and demands, alternative mechanism for arrangement of liquidity in case of emergency need, for example asking marketing team to fetch more deposits, convincing depositors to lengthen their deposit period, and arrangement of funds from money market (Hassan, 2009). The interesting finding in this regard was that spreading awareness of Islamic banking, which could serve as a competitive advantage for the Islamic banks (Khattak, 2010), was ranked last in liquidity management practices and Islamic banks also rely on the same formal or informal means to manage their liquidity as conventional banks. Moreover, the liquidity management process in the banking sector can be seen as a multidimensional process whereby every functional department contributes towards the management of the liquidity from risk management to the marketing department.

This risk management structure of Islamic banks seems credible and strong in the Islamic banking sector of Pakistan (Hassan, 2019). Islamic banks have an appropriate organizational structure, regulator's influence and both formal and informal mechanisms to manage their liquidity in an appropriate manner. There is some need to focus on the Islamic aspect of banking

as well, whereby it is of imperative importance that customers and society at large are educated on the true concept and functioning of Islamic banks in Pakistan.

7.2.3 Overall discussion and results on survey (questionnaire) analysis

Overall, it was found that Islamic banks seem equipped with the state-of-the-art mechanisms and practices of liquidity management. An appropriate organizational structure and regulatory framework is in existence for better liquidity management of Islamic banks in Pakistan (Kanwar, 2005). In addition, both formal and informal mechanisms of liquidity management are practiced in the Islamic banking segment of the banking sector of Pakistan. Liquidity management is considered an important and multidimensional aspect of Islamic banking operations and all functional departments, such as investment, risk management and marketing, help to reduce this risk. Interestingly, liquidity management in Islamic banking segment is preceded like it is practiced in conventional banking segment and there is a relatively less focus on educating and improving awareness of Islamic banking's true conception and functioning among depositors, customers and society.

Depositors also seem to be attracted towards profits and service aspect of Islamic banking and had a short-term investment horizon with Islamic banks and it was also indicated that they were less aware of the concept and had less understanding of the nature of Islamic banking (Ismail, 2010; Ahmad & Saif, 2010). They wanted to support Islamic banking but were not confident about the nature of Islamic banking in Pakistan (Khattak, 2010). Further, being Islamic also did not seem an important criterion for the customers to be attracted or be repelled from Islamic banks. The primary reason for this was a lack of trust in the nature of Islamic banking and lack of

related awareness. Thus, along with other regulatory and formal mechanisms to improve Islamic banks' liquidity, it is of the utmost importance to win the confidence of the investors and build a true Islamic image of Islamic banks (Khattak, 2010), which would attract people with a religious orientation towards the bank, and both profits and liquidity position of Islamic banks would further improve. This could be the deciding factor in this era of competition between Islamic and conventional banks and being Islamic is a characteristic of Islamic banks only. This characteristic should be exploited on strategic horizon.

7.3 Discussion on Qualitative Analysis

Lastly, qualitative data by means of interview were collected and analyzed from both depositors of Islamic banks and Islamic bankers. The aim of this data analysis was to have an in-depth insight and understanding of the concept and behavior of both Islamic banks and depositors. These insights could better elaborate as to how Islamic banks should manage their liquidity risk and identify any shortcomings in this regard. Discussion on qualitative data is segregated into two parts whereby firstly, findings from Islamic bankers are elaborated and after that findings from the data analysis of depositors are discussed.

7.3.1 Results and discussion of Islamic bankers' responses – qualitative data analysis

Islamic bankers were interviewed for their general conception of liquidity, role of regulators, liquidity management practices, bank structure and marketing perspective of Islamic banking. It was found that Islamic banker's related liquidity to cash inflow versus cash outflow management, and some Islamic bankers emphasized bringing more deposits and attracting more

customers towards the bank (Jamal, &Naser, 2003). This conception satisfied basic understanding of liquidity.

With regard to the role of regulators, it was found that SBP is a strict regulator, which has capital and reserve requirements for all the banks in the industry. Capital requirements of Islamic banks are less than capital requirements of conventional banks and SBP supports and promotes growth of Islamic banks (Khattak, 2010; Ahmad & Saif, 2010). This again is a good factor for the Islamic banks in Pakistan. Further, structurally, it was found that Islamic banks have a separate risk management department and involvement of Sharia board, which ensures that banks do not invest their money in an aggressive manner or in risky ventures (Kanwar, 2005). Thus, there are legislative and structural checks on the liquidity management of Islamic banks.

Islamic bankers were also asked to provide details on the liquidity management practices of their banks. Bankers revealed that there is a regulatory mechanism of cash reserves, which are maintained, with the SBP. Further, there are certain policies which discourage cash withdrawals of fixed deposit holders. These policies are related to the imposition of penalties on premature withdrawals. Such penalties go to charity (Obaidullah, 2005) but due to these penalties, fixed deposit holders are discouraged from withdrawing their money. Further, regular cash requirements of the banks are determined on the basis of past experience as Islamic banks cannot restrict cash withdrawals of current account holders. Apart from that bankers also maintain close relationships with their larger customers and such customers are encouraged to intimate any cash requirements in advance, so that the bank can easily manage the amount. The liquidity management procedure is also centralized whereby all the excess cash is transferred to head

office, where they maintain reserve requirements with SBP and after keeping a cash cushion the remaining amount is invested in different assets. Further, bankers also explained that early withdrawals from time deposit holders are rare, large amounts of money are not withdrawn by current investors, and payments are mostly made through checks and not through cash. Bankers also explained that they can also manage emergency cash requirements by pushing marketing staff to arrange for more deposits or by asking for a short-term loan from money market or other banks. Thus, Islamic banks manage their liquidity using both formal and informal mechanisms (Akhtar & Sadaqat, 2011). Lastly, Islamic bankers also stated that banks could also opt for share or bond issuance for the arrangement of cash and most Islamic banks have strong investors who would be willing to bail Islamic banks out from any liquidity-related problem.

On marketing perspective, it was found that most of the banks are moving towards Islamic banking as there is increased demand for Islamic banking (Khattak, 2010). Customers are attracted towards Islamic banking because of religious reasons and individuals with a current account in conventional banking are easy to grab. Further, conventional marketing tactics are used to attract customers like direct door-to-door marketing, mass media marketing, product and service developments, word of mouth, personal relations and referrals (Jamal & Naser, 2010; Ahmad & Saif, 2010). All of these marketing means are used to attract deposits in the banks.

Lastly, some Islamic bankers were also found to have low levels of understanding of Islamic banking and related concepts. Bankers mostly had the same connotations of ‘it is Islamic’, ‘it is based on profits not interest’ and ‘mufti has declared Fatwa’ etc. and these things do not satisfy some customers and they raise questions, concerns and negativities. This indicates that many

Islamic bankers are not able to satisfy the concerns of depositors as to whether Islamic banking is Islamic or not (Khattak, 2010). Banks should consider this and appropriate training should be provided to Islamic bankers or some Alam with better knowledge and expertise be appointed in each branch (Dusuki & Abdullah, 2007).

Overall, a solid liquidity management framework exists in Islamic banks of Pakistan. The framework relies on various regulatory and policy requirements along with formal and informal practices. Basically, the liquidity management mechanism of Islamic banks resembles that of conventional banks. The difference is the existence of Sharia board and religious orientation of the customers, where customers still have doubts and Islamic bankers are not able to satisfy their concerns. This calls for greater attention on the construction of a better Islamic image of Islamic banks.

7.3.2 Results and discussion of Islamic bank depositors' responses – qualitative data analysis

Islamic bank depositors were also interviewed for their opinion on the product offerings, usage, conception, satisfaction and preferences on Islamic banking. It was found that Islamic banks offer the same products as conventional banks, but these products are consistent with Sharia principles (Hassan et al, 2003). Most depositors opined that they want to have a long-term relationship with an Islamic bank and mostly depositors were using products of current account and Ijarah financing (Sabir, 2008). Further, it was also found that many depositors had a poor conception of Islamic banking. People with knowledge of Fiqh seemed to have a better conception of Islamic banking (Khattak, 2010). The major concern of depositors with regard to

poor conception was that Islamic bankers were not able to explain Islamic banking and were unable to satisfy depositors.

Two dominant opinions in this regard emerged whereby some depositors opined that Islamic banking is Islamic and others think that it is not Islamic. People who think it is Islamic argue that state bank and other regulators conduct audits and ensure it and then there is Sharia board as well, where a Mufti ensures that Islamic banking remains consistent with the principles of Islam. Other people who think that Islamic banks are not Islamic stated that they are confused and bankers are not able to clarify these confusions; such people were also concerned about the lack of disclosure from Islamic banks (Al-Omer & Abdel-Haq, 1996). Overall, the opinion in this regard was mixed.

Further, consistency with Islamic principles was cited as one of the major reasons of satisfaction and preference from depositors (Arif & Anees, 2012). Other reasons were related to service and profit motive (Ismail, 2010). Some people also stated that they opted for Islamic banks due to business or referral reasons. Lastly, depositors stated that there is no effective direct marketing and banks also do not have much of a strategic orientation, which was also evident as most of the Islamic banks have products and marketing mechanisms similar to conventional banks and Islamic banks do not focus on their most effective means of differentiation: Islamic orientation. Either bankers are unable to explain or satisfy the customers or customers are overly suspicious (Khattak, 2010).

Thus, in order to attract the customer with a religious orientation, it is of imperative importance that Islamic banks train their employees to better deal with the potential customer and explain

why Islamic banking is Islamic. This would further strengthen the liquidity of the Islamic banks in Pakistan.

7.4 Overall discussion and synthesis

Islamic banking is still in its infancy and the liquidity management of these banks is considered very important. As explained previously, three types of data sets were used to analyze liquidity management in Islamic banking segment of Pakistan. It was found that there exist two types of customers/depositors in Islamic banks: the ones who have religious orientation and the other who have profit orientation. Depositors having higher profit orientations are motivated by higher return sharing ratios (Ismail, 2010), for which banks have to tie up their assets in long-term financings: Musharakah and Mudarabah in the case of Islamic banking. Banks on the other hand need to manage their liquidity so some proportion of the investments is also made in NOPs like marketable securities or Ijarah-based options, as these are more flexible and liquid options (Sabir, 2008). Thus, higher return sharing paid and investments in the NOP determines the investment of Islamic banks in long-term financing options (Ismail, 2010). These also increase CO as profit-oriented depositors are more costly to retain and attract. Further, customer/depositors with religious orientations do not like higher profit sharing ratios and could be attracted without any significant costs. These customers assess the banking operations and investments to determine if the banks' operations are consistent with Islamic principles (Khattak, 2010; Awan & Bukhari, 2011). Thus, investments in operational financing like Musharakah and Mudarabah attract customers with religious orientation. Moreover, investments in the operational assets also reduce need for liquidity reserves as this increases trust of customer in the Islamic banks. The problem here is that people with higher profit orientation require higher return

sharing and people with higher religious orientation tend to denigrate it. This is due to perceptual differences whereby the religious depositors confuse higher profit ratios with interest. Both survey and qualitative analysis confirm that depositors have a poor conception of Islamic banking and there is a lack of awareness with regard to the nature of Islamic banking. Thus, as of now, Islamic banks could either attract depositors with religious orientation or depositors with profit orientation. But if the conceptions of depositors could be improved, this problem would be solved and the liquidity of Islamic banks would prosper.

Further, there is also clear indication that the Islamic banking segment is growing and liquidity of the Islamic banks is dependent on referrals or good image of the Islamic bank. This was indicated by all three analyses, where lag of deposits correlated with deposits implying that current deposit brings more deposits and then survey analyses also indicated that Islamic bankers and their marketers use referrals and word of mouth to increase their customer and deposit base (Jamal & Naser, 2010). In addition, there is also an indication that the market is competitive and customers also prefer competitive rates, sometimes for religious reasons, depositors are confused and suspect issues with the current Islamic banking system; luring customers, particularly customers with higher profit orientation, would enhance the operational costs of the bank (Ahmad & Saif, 2010).

It was indicated by the Islamic bankers that there are regulatory as well policy-related checks to ensure effective liquidity management of Islamic banks. The State bank has reserve requirements, Islamic banks centrally manage liquidity and there are penalties on premature liquidation of time deposits. Further, Islamic banks can easily arrange for short-term loans or

manage deposits from the market for any emergency requirements. There are informal ways to manage liquidity as well, for instance major customers are followed closely for their cash demands and such customers are requested to intimate in advance of any big withdrawal. Further, they stated that most of the big transactions are not cash based and checks or other mechanisms are used to transfer the funds. It was also argued that Islamic banks have strong investors who would bailout Islamic banks from any liquidity-related issues, if need be.

Lastly, in terms of marketing mechanisms, Islamic banks mostly act like conventional banks offering door-to-door direct marketing, using referrals, advertising on mass media and providing services. The Islamic aspect of marketing is a bit neglected. Both depositors/customers and Islamic bankers do not have a good conception of Islamic banking. Depositors are confused and bankers are not able to clarify their ideas. There was an indication that bankers do not actively propagate Islamic banking and even when they are asked about Islamic banking their answers are not satisfactory. The analysis also indicated that depositors with a profit orientation are attracted towards Islamic banks due to higher returns and depositors who have a religious orientation are confused (Khattak, 2010). Islamic banking is not considered Islamic and depositors state that they would not close down their account, if Islamic banking is proved to be non-Shariah compliant. This indicates that there are other characteristics like profits or service that attract depositors towards Islamic banking. Islamic banks are not capitalizing on their very nature which could prove to be a competitive advantage for them. This would also have implications for the liquidity management of these banks as more depositors would bring more cash to the banks and their liquidity concerns would be decreased. Along with decrease in their liquidity concern,

Islamic banks would also be able to yield more profits. Concluding, liquidity management process of Islamic banks should be robust, creditable and effective (Alsayed, 2007).

Chapter 8

Conclusion, Recommendations and Future Research Directions

This chapter concludes the research by providing an overview of findings, recommendations and directions for future research.

8.1 Conclusion

The Islamic banking segment of Pakistan has witnessed unprecedented growth in the last decade. There has been intense competition between Islamic banks and conventional banks in order to increase their market share. Liquidity is considered a major concern, whereby retaining more cash with the bank would improve its liquidity, but in such a scenario the profits of the bank are reduced, where as retaining less cash could improve profitability but the liquidity risk of the bank would also be increased. So, banks have to consider a tradeoff between profitability and liquidity risk. Management of liquidity has been considered a tricky task where both asset and liability sides are to be adjusted for better liquidity management. Then there are regulatory requirements like SBP's reserve requirements, which are to be met. These requirements hinder the profitability of the banks, but also provide banks an option of the last resort. Further, there are various policies to maintain liquidity of the banks, like prior intimation on withdrawals from the fixed deposits and related penalties etc. Further, liquidity is also managed through informal means within each branch, whereby each branch of the bank tries to attract cash deposits and defer cash withdrawals. This study in this regard provides a comprehensive overview of the liquidity management practices in the Islamic banks of Pakistan.

In order to assess liquidity management practices of the banks, this study considered three types of data: secondary financial data for econometric analysis, questionnaire survey for statistical descriptive analysis and interviews for qualitative analysis. Three models were considered for the econometric modeling (i.e. asset model, liability model and liquidity reserve model) in order to assess liquidity management from all three aspects of the Islamic banks. A survey was conducted with both Islamic bankers and bank depositors and interviews were also conducted with both Islamic bankers and depositors. Three types of data allowed me to have better insight into formal and informal mechanisms of liquidity management.

The findings of the study indicate that Islamic banks rely on various formal and informal mechanisms in order to manage their liquidity. Both investment and deposit sides are managed in this regard whereby the deposit side is mostly managed by attracting more depositors. In this regard there was an indication of two types of cohorts of Islamic banks' depositors. The first cohort has a religious orientation and is attracted towards Islamic banks because of their Islamic image and the second cohort has profit orientation and is attracted in expectation of higher returns. In order to yield higher profits banks have to invest more in long-term investments based on Mudarabah and Musharakah. Further, in order to maintain liquidity, banks also invest in NOP options. The more the liquidity of the bank, the more it would be able to invest in long-term investments. There are cost implications as well, as profit-oriented customers require higher returns and, thus, the cost of banking operation increases with depositors having high profit orientation. Religious depositors, on the other hand, are easy to attract and retain without any significant operating cost. Such depositors just assess the operations and investments of the banks on Islamic standards and deposit their money in the Islamic banks. Thus, investments in

Mudarabah and Musharakah-based financings attract religious customers towards Islamic banks and the need for liquidity is also reduced due to trust factor. Customers with high profit orientation, on the other hand, require higher profits and higher return sharing is found to have a negative association with perceptual Islamic image of Islamic banks as depositors who have a religious orientation were found to avoid higher profit sharing. This might be due to misunderstanding of the investors who were confused on the concepts of profits and interest. It was indicated by both surveys and interviews that depositors were confused about the concept of Islamic banking and whether it really is Islamic or not. So, considering the findings of the study, Islamic banks could either attract depositors with Islamic orientation or depositors with profit orientation. There is a serious need to rectify the conception of Islamic depositors in this regard. So that Islamic banks are able to serve both cohorts of depositors. There was also indication of the informal mechanisms of marketing whereby depositors are attracted through referrals, word of mouth and personal relations.

Further, in terms of liquidity management, there were certain formal and informal ways to manage the liquidity of the banks. In policy terms, there are requirements of the SBP, after that all the cash is centrally managed and invested, then there are policies like penalties on premature withdrawal from fixed deposits, etc. Emergency mechanisms to manage short-term liquidity problems are also available in the Islamic banks. Further, banks keep in touch with customers and their liquidity requirements are anticipated in advance and cash is managed accordingly. IN addition, all the big payments are made through checks which further decreases requirements of cash in hand for Islamic banks. Lastly, Islamic banks have strong investors and they can easily be managed for additional funds, if need be. Banks also use aggressive direct marketing to lure

depositors and they try to provide good services to their customers. All formal and informal ways of marketing are being used by Islamic banks at the moment. Overall, Islamic banks are following the same marketing strategies as are used by conventional banks in Pakistan.

The main problem is related to the Islamic aspect of marketing, which is a bit neglected at the moment. Islamic banks do not highlight their Islamic image and there is still confusion in this regard. Both customers and even Islamic bankers did not have an appropriate conception of Islamic banking and its mechanisms. Depositors seemed confused on the true nature of Islamic banking and Islamic bankers do not seem persuasive enough to satisfy their queries and concerns. Thus, depositors with profit orientation would be attracted towards Islamic banks in expectation of higher returns and depositors with religious orientation are doubtful as to whether Islamic banks are really Islamic. Thus, it seems that Islamic banks are not capitalizing on their very nature and are following industry norms and standard practices to attract deposits and manage their liquidity. Islamic banks do not seem to have many liquidity issues and their liquidity seems to improve over time.

Summing up

- i. Liquidity is considered a major concern, whereby retaining more cash with the bank would improve its liquidity, but profitability of the bank are reduced, and vice versa.
- ii. There was an indication of two types of cohorts of Islamic banks' depositors. The first cohort has a religious orientation and is attracted towards Islamic banks because of their Islamic image and the second cohort has profit orientation and is attracted in expectation of higher returns.

- iii. In order to yield higher profits banks have to invest more in long-term investments based on Mudarabah and Musharakah.
- iv. There are cost implications as well, as profit-oriented customers require higher returns and, thus, the cost of banking operation increases.
- v. Religious depositors, on the other hand, are easy to attract and retain without any significant operating cost.
- vi. There was also indication of the informal mechanisms of marketing whereby depositors are attracted through referrals, word of mouth and personal relations.
- vii. The main problem is related to the Islamic aspect of marketing, which is a bit neglected at the moment.
- viii. Islamic banks do not highlight their Islamic image and there is still confusion in this regard.
- ix. Both customers and even Islamic bankers did not have an appropriate conception of Islamic banking and its mechanisms.
- x. Depositors seemed confused on the true nature of Islamic banking and Islamic bankers do not seem persuasive enough to satisfy their queries and concerns.

8.2 Recommendations

In the broader context, Islamic banks should strengthen their Islamic image and customer service. The recommendations of the study are divided into three parts. The first part provides recommendations to Islamic bankers, the second part to depositors and the third part to the regulators of Islamic banks in Pakistan.

The following are specific recommendations for Islamic bankers:

- There is consistent evidence that depositors have conceptual issues pertaining to the nature of Islamic banking. Bankers should understand the issue and they should try to train their staff on Islamic banking rules and relevant Sharia issues. This would attract more depositors to the bank and the liquidity position of the Islamic banks would be improved.
- An Alam with sound knowledge and understanding of Islamic banking should be available in each branch of the bank so that customers with issues could consult the Alam.
- The liquidity practices of the Islamic banks should improve, although there are many liquidity management mechanisms that are being utilized. The issue is that all of these mechanisms are disjointed and there is no integrated liquidity management framework in place. So, an integrated liquidity management framework should be devised and implemented among Islamic banks of Pakistan.
- Islamic banks should consider improving their image, where trust is a major factor. It was suggested that Islamic bankers should work on the image building of Islamic banks. More trust in Islamic banks would not only attract new customers, but would also boost the trust factor of existing customers and such customers would remain loyal to the banks.
- Banks tend to focus more on the liability side of liquidity management, where more focus is levied on piling up of depositors. The asset side focus is not prominent. Bankers could invest the available money in different types of maturities, different types of securities and different assets in order to better manage their liquidity.

- The liquidity management process in each branch is quite informal, where cash requirements are anticipated on the basis of experience. The operations manager of banks should be better trained for effective liquidity management in Islamic banks of Pakistan.
- More focus of the depositors of the banks remained on the current accounts, which are not considered much profitable and require more liquidity from bank's side. The bankers should attract customers towards time deposits or fixed deposits, which are more profitable and do not require increased liquidity. Thus, attracting such customers would be more beneficial to the banks.
- Bankers should also encourage customers to use plastic money like debit or credit cards or checks, so that the cash requirements of the customers are reduced and, subsequently, banks need less cash as liquidity reserve.
- A separate liquidity office should be placed at each regional/zonal office for better implementation of liquidity policy.

Certain recommendations were also proposed to the customers/depositors of Islamic banks in Pakistan. These recommendations are as follows:

- Customers should trust in Banks and try to become aware of the concept and functioning of Islamic banks. They can demand information from their banker and discuss their issues.
- For better management of money and prevention of problems, customers should cooperate with banks and should tell banks in advance of any large cash amount required. Further, customers should also prefer using other payment/cash delivery methods like check, pay order, credit card and debit card.

Lastly, regulators of Islamic banks are also provided with the following recommendations:

- SBP should ensure best liquidity management practices among Islamic banks of Pakistan.
- There are issues relating to the KIBOR and its use in Islamic banks, the State Bank should construct some other benchmark which is consistent with Islamic norms for better utilization and to meet the concept of Islamic banking in Pakistan.
- There should be regular audits and the State Bank should impose high penalties on non-compliance with the Shariah and liquidity policy.
- State Bank should also stand ready to help and bailout any Islamic bank facing liquidity-related issues and problems.

8.3 Limitations of Study

Detailed analysis is made in the study by adopting a triangulation (validation) (validation) method using interviews, and primary and secondary data but there are some limitations in the study that should be highlighted.

- 1) The thesis limits its scope of research to internal banking liquidity risk management. This study ignores the market share of Islamic banks and the strategies of Islamic banks for the buying and selling of securities.
- 2) This study only deals with liquidity risk management practices and mitigation strategies; it ignores other risks associated with Islamic banks. These risks include credit risk, operational risks, business risks and time lapses; therefore, major research could be done on these aspects of risk management.
- 3) This research is based on Islamic banking which operates under conditions that differ from conventional banking: first, it is in a development phase; second, the conventional

banking industry is far more stable; and third, there are fewer Islamic banks than conventional banks. These temporary conditions mean that in the future the recommendations of this thesis may need to be revised.

- 4) The secondary data based on time series are limited because the first Islamic bank in Pakistan came into being in 2002 and later other Islamic banks were established, such as Bank Islami, Albaraka Islamic Bank and Burj Bank.
- 5) This study is based on two important entities: Islamic bankers and depositors of Islamic banks. The liquidity risk is studied in response to these two types of individuals. The limitation of the study is that the role of scholars, colleges, universities and government in mitigating the liquidity risk management is not studied.
- 6) The degree to which the perception, understanding and awareness of depositor's leads to mitigation of liquidity risk of Islamic banks of Pakistan was not studied. Therefore, future research should investigate whether the three aspects mentioned above affect liquidity risk management and mitigations or not.
- 7) The conventional banking does not come in the scope of the current study, which should be taken in future studies.

8.4 Directions for Future Research

This study provides fresh evidence on the liquidity management practices and prospects in Islamic banking of Pakistan. Further following future avenues for research within this domain of knowledge are:

- Subsequent study could provide a comparative analysis of both Islamic and conventional banks in Pakistan for a better understanding of the differences and similarities in both systems.
- An experimental study should be designed to develop a set of literature and related data in order to help bankers to better educate and increase the awareness of customers.
- A study could also be conducted to assess cash demand patterns of depositors to better manage cash in hand of the banks.
- A detailed investigation into informal mechanisms of liquidity management in the Islamic banks could be conducted. A set of benchmark practices for liquidity management in Islamic banks should be identified and enacted upon.

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Appendix – I

Questionnaire relating to Islamic bankers

Questionnaire*(Data from Islamic Banker)*

This survey is to assess liquidity risk management for Islamic Banks. The survey is designed for getting information from Islamic Bankers. I would be grateful if you could take some of your time to fill out this questionnaire.

Please indicate Yes or No to the following:

Organizational Structure of Your Islamic Bank		Yes	No
1.	Is there a special Division/Team dealing with risk management?		
2.	Is there a particular Director/Manager responsible for liquidity management?		
3.	Coordinate liquidity management decision with the State Bank of Pakistan?		
4.	Depend on State Bank of Pakistan decision (direction) to manage liquidity risk problem?		

Please encircle the appropriate number against each statement according to the scale given below:

Strongly Disagree	Disagree	Indifferent/ Neutral	Agree	Strongly Agree
1	2	3	4	5

Liquidity Risk Management		1	2	3	4	5
1.	Your bank maintains adequate cash reserve to manage day-to-day liquidity issues.					
2.	Your bank puts extra liquidity above your reserve requirements.					
3.	Your bank has strong strategies to communicate with your depositors who have big amount of deposits regarding their withdrawal time/schedule.					
4.	Your bank regularly calculates and analyzes pattern of liquidity withdrawal for anticipation and onward action to re-gear fresh deposits.					
5.	Your bank convinces depositors to lengthen tenure of time deposits from short term into long term for retention of term deposit for term financing purposes.					
6.	In case of short-term liquidity need, your bank locates some short-term deposits from money market and liquidity through sale of Sharia certificates.					

7.	Your bank allocates some funds in the form of investment risk reserve (IRR) and profit equalization reserve (PER).					
8.	Your bank has strong marketing team to search for fresh deposits.					
9.	As a majority of the population is Muslim, public awareness campaign for Islamic deposits (as per Sharia compliance) is one of the main objectives of your bank.					
10.	To minimize cost of funds, your marketing team prefers to procure current and saving deposits instead of term and costly deposits.					
11.	In case of sudden liquidity drain, your bank has strong interim liquidity strategies to cope with this issue.					
12.	Your bank's liquidity risk management team is efficient enough as compared to your competitor banks.					
13.	Your liquidity risk management team is well equipped, trained and technologically up-date to manage, monitor and control liquidity risk.					
14.	Your bank strongly follows liquidity requirements as per Basel-III accord.					
15.	Your bank strongly follow liquidity requirements as per requirements of SBP (State Bank of Pakistan).					

In case of any other information regarding liquidity risk management in your bank, please write:

THANK YOU VERY MUCH FOR YOUR TIME AND COOPERATION

Appendix – II

Questionnaire relating to Islamic depositors

Questionnaire**(Data from Islamic Banks Depositors)**

This survey is to assess liquidity risk management for Islamic banks. The survey is designed for getting information from Islamic banks' depositors. I would be grateful if you could take some of your time to fill out this questionnaire.

Latest degree of education (Please choose only one answer).

- ☐ Senior high school
- ☐ Undergraduate degree
- ☐ Postgraduate
- ☐ Doctorate/Research Degree

Please indicate Yes or No for the following:

As depositor of Islamic bank...		Yes	No
1.	I always use Islamic bank financing (house financing, car financing etc.)		
2.	I completely understand about <i>Mudarabah</i> saving deposits.		
3.	I completely understand about <i>Qard</i> deposits.		
4.	I fully understand the Islamic banking operation and <i>Sharia</i> principles.		
5.	I frequently monitor the performance of your Islamic bank.		
6.	I also have an account in a conventional bank.		
7.	I am satisfied with my bank's facilities (debit/credit card, gift, etc.).		
8.	I usually earn a bigger revenue-sharing return on my deposits (profit motive).		

Please encircle the appropriate number against each statement according to the scale given below:

Strongly Disagree	Disagree	Indifferent/ Neutral	Agree	Strongly Agree
1	2	3	4	5

If you have Islamic time deposits (depositor), your intentions are:		1	2	3	4	5
1.	I want to support Islamic investment projects for the sake of people (ummah) (Religious and investment motive).					
2.	I deposit my money to support the development of Islamic banking and business sector.					
3.	It will make me easy to get bank's financing facilities (free loan, house financing, etc.) (Commercial motive).					
4	I want to take my money in its 1 month maturity date (routine transaction motive).					
5	I want to take my money in between 3 – 6 months in its maturity date.					
6	I want to take my money after 1 year (12 month tenure) in its maturity date.					

7	I want to switch tenure of my deposit from short-term into long-term one.					
8	I want to withdraw the amount and amount is deducted in short term before maturity.					
9	I deposit money because there is no restriction on withdrawals or numbers of transactions in short-term investment.					
10	If I want to take money then there is no deduction of service charges if the balance maintained is low after withdrawal.					

Please encircle the appropriate number against each statement according to the scale given below:

Strongly Disagree	Disagree	Indifferent/ Neutral	Agree	Strongly Agree
1	2	3	4	5

You will surely take all of your money and close your account in Islamic bank if:		1	2	3	4	5
1.	My Islamic bank does not pay competitive return as I expected.					
2.	My Islamic bank pays lower return sharing than interest rate in conventional banks.					
3.	Economic conditions require me to hold cash in hand.					
4.	It is proven not to be a <i>Sharia</i> -compliant Islamic bank.					
5.	It does not have proper network services, IT and offer attractive banking products.					
6.	I am facing service issues at my existing Islamic bank.					

Date of filling in Questionnaire (optional):_____ Timings (optional):_____

Name of Respondent (optional): _____

Working Organization: _____

Any suggestions you want to give:

THANK YOU VERY MUCH FOR YOUR TIME AND COOPERATION

Appendix – III

Qualitative interviews guide – Islamic depositors

Information Letter to the Participants

THE MANAGEMENT OF LIQUIDITY RISK IN ISLAMIC BANKS OF PAKISTAN

Researcher: Salman Masood

Supervisor: Dr. Ahmad Raza Bilal

Superior College, University Campus, Lahore

The basic aim of this information letter is to make the participants fully aware of all the important details of the research conducted and the terms and conditions relating to their kind participation in it.

I want you to take part in my research. If you agree to take part in my research, kindly sign the attached informed consent form. If you have any confusion or queries regarding any part of my research, kindly contact me and it will be a real pleasure for me to help you.

Objectives of the Study

This research aims to analyze the management of liquidity risk in the Pakistani Islamic banking industry by balancing the asset and liability sides. Specifically, it aims to analyze the internal Islamic banking mechanisms to manage liquidity in order to understand the liquidity behavior of depositors and liquidity management of Islamic banks and to construct a liquidity management program to improve the current practices of managing liquidity risk.

With the quantitative analyses, the objectives of the research are to measure the demand for liquidity withdrawals from depositors and the allocation of bank deposits in relation to managing

liquidity; to find factors determining balanced assets and liabilities and factors explaining the optimal liquidity reserves.

In addition, with the qualitative analyses, the objectives of this research are: to investigate liquidity management practices; to analyze the organizational structure of Islamic banks to manage liquidity; to identify depositors' reasons for withdrawing funds from Islamic banks; and Islamic banks' liquidity management strategies.

Therefore the objectives of this study are given as follows:

- i. To examine the liquidity behavior of depositors towards existing Islamic banks.
- ii. To examine the current practices of liquidity risk management and the organizational structure in relation to managing liquidity.
- iii. To identify that what factors influence Islamic banks to balance liquidity on the assets and liabilities side and their liquidity management strategies.

Participation in the study:

Your kind participation will be of 60 to 90 minutes open-ended questions through face-to-face interview method. The targeted persons will be recruited for this study on the following basis:

- 1) The persons should be permanent employees of a full-fledged Islamic bank.
- 2) These persons should be employed with the bank for not less than three years.
- 3) These persons will be those who directly or indirectly deal with liquidity management.
- 4) These persons should at-least know Islamic products well.
- 5) The age of such persons should be in the range from 35 to 45 years.

Right to withdraw from the study:

The participation of your kind self in my research is purely by your own choice. If the terms and conditions are not agreeable to you, you have full right to choose not to participate. You are allowed to withdraw from the research at any time if it is not possible for you to continue further. Also there will be no compulsion for you to give a reason for your withdrawal from the said research.

Usage of interview data:

It is of vital importance for all participants to note that the data provided by you will only be used by me as a requirement for my PhD thesis. This data will be included in some of the scholarly articles relating to my research or it may be discussed with the research panel members so total confidentiality cannot be promised, but I ensure you that names will never be included in any part of my study.

Reporting the findings of the study:

After the data analysis, a report will be prepared for completing my PhD and some data will be handled and published in scholarly articles which will enhance knowledge for society regarding Liquidity Risk Management of Islamic banks. This written report along with the analysis will also be available for the participants of the study.

I am sending you the questions that are vital for the interview. I hope that you will be able to serve as a participant of the study.

Contact Details:

Salman Masood

E-mail: directorqa@superior.edu.pk

Mobile # 0300-6337009

Participant's Informed Consent Form

THE MANAGEMENT OF LIQUIDITY RISK IN ISLAMIC BANKS OF PAKISTAN

Researcher: Salman Masood

Supervisor: Dr. Ahmad Raza Bilal

Superior College, University Campus, Lahore

Informed Consent

The participant information letter, which is attached with this consent form, has been clearly viewed by me. It fully explains the aims, objectives and methods of the research conducted. I have been informed in clear wordings of the terms and conditions regarding my participation in this research and that I have the right of withdrawal from this research at any time. I accept this fact that during the conduction of the research, data cannot be kept entirely confidential. After considering all the above-mentioned terms and conditions pertaining to the study, I agree to participate in it and provide all the information required from me for the benefit of humanity.

Below are the details of my availability for the interview

Day

Date

Time

Phone

Venue

Signature

Participant Name

Please send your signed consent form via email at directorqa@superior.edu.pk Please don't hesitate to contact me for any further assistance.

Interview Guide (Islamic Depositors)

Part – One: Background Information

Date of Interview: _____ Interview Time: _____
Name of Bank: _____ Branch: _____
Name of Interviewee: _____ Bank Experience: _____

Part – Two: Interview Questions

☐ **General Questions:**

- 1) What are the different products you know that are offered in the Islamic Bank?
- 2) How will you differentiate between interest and profit?
- 3) What types of Islamic banking products are you using nowadays?
- 4) Are you satisfied with the services offered by your Islamic bank?

☐ **Behavior of Depositors**

- 1) Why have you chosen an Islamic bank for investment?
- 2) Are you a short-term investor or long-term investor in Islamic banking products?
- 3) What different factors and services provided by your bank satisfied you?
- 4) In your viewpoint, is Islamic bank following Shariah Law?
- 5) Which of the factors make Islamic banking attractive to you?
- 6) Are you satisfied with the profits offered by your Islamic bank?

THANK YOU VERY MUCH FOR YOUR TIME AND COOPERATION

Appendix – IV

Qualitative interviews guide – Islamic bankers

Information Letter to the Participants

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- ii. To examine the current practices of liquidity risk management and the organizational structure in relation to managing liquidity.
- iii. To identify what factors influence Islamic banks to balance liquidity on the assets and liabilities side and their liquidity management strategies.

Participation in the study:

Your kind participation will be of 60 to 90 minutes open-ended questions through face-to-face interview method. The targeted persons will be recruited for this study on the following basis:

- 1) The persons should be the permanent employees of a full-fledged Islamic bank.
- 2) These persons should be employed with the bank not less than three years.
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- 4) These persons should at-least know Islamic products well.

- 5) The age of such persons should be in the range from 35 to 45 years.

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Day

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Time

Phone

Venue

Signature

Participant Name

Please send your signed consent form via email at directorqa@superior.edu.pk Please don't hesitate to contact me for any further assistance.

Interview Guide (Islamic Bankers)

Part – One: Background Information

Date of Interview: _____ Interview Time: _____
Name of Bank: _____ Branch: _____
Name of Interviewee: _____ Bank Experience: _____

Part – Two: Interview Questions

☐ **General Questions:**

- 1) How would you define the notion of liquidity?
- 2) What measures do you use to improve liquidity/deposits as per your assigned deposit targets?
- 3) What are the different products you are offering in Islamic Bank?
- 4) What is the response of customers towards investment in the Islamic products?

☐ **Liquidity Risk and its Management-related Questions:**

- 1) What is the process of maintaining cash reserves of your bank?
- 2) What is the liquidity risk management policy of your bank?
- 3) What indicators of liquidity do you monitor?
- 4) What type of liquidity issues do you face in your bank?
- 5) What are the marketing strategies to attract deposits?
- 6) What ratio does your bank maintain for balance i.e. advances to deposit ratio?
- 7) What strategies are preferred by your bank for mitigating liquidity risk?

THANK YOU VERY MUCH FOR YOUR TIME AND COOPERATION

Appendix – V

Themes and thematic analysis

Qualitative semi-structured interviews

Islamic Bankers (Interview-based Themes)

Themes	Description
Liquidity Understanding	1. Cash inflow vs. cash outflow 2. Deposits 3. More customers 4. Problem: Crunch, Lost of trust from people 5. More focus on bringing cash and retaining that
SBP	1. Reserve requirements 2. Different responses on reserve ratio 3. Strictness of SBP 4. Reserve requirements and branch requirements are increasing 5. Facilitating Islamic banking: no License for conventional banks, no requirement on minimum branches, low capital requirements
Liquidity Management	1. Predetermined cash reserve limits 2. ATM requirements 3. Foreign currency – Depends on availability, customer has to intimate prior 4. Prior intimation from big customer 5. Better customer relationship 6. Regular cash requirement is experience based 7. Regular cash could be arranged from other banks 8. Daily cash goes to head office 9. Most transactions are not cash based

	10. Penalty on prior withdrawals from fixed deposit customers 11. Penalty on early withdrawal goes to charity 12. Building customer trust: money is secured 13. Early withdrawals are scarce 14. Provision of services 15. Issues/problems – Taxes, competition 16. Emergency mechanism to draw liquidity 17. IPOs or bond issuances 18. Islamic banks have strong investors – no capital requirement problem
Bank structure	1. Risk Management department exists in bank, credit risk assessment is described 2. Shariah board do not approve financing non-Islamic ventures
Marketing	1. Banks are moving towards Islamic banking 2. Religious reasons compel customers 3. Target people who have current account in banks
Conventional Marketing	1. Sales marketing department 2. Conventional media 3. Direct marketing 4. Product development 5. Personal relations references 6. Better service 7. Trust

	8. Word of mouth
Issues in guidance	1. Lack of knowledge of bankers 2. People do not agree and raise negativities
Islamic banking – Islamic	1. Rate of profit fluctuates 2. Documentation and way is changed 3. Reference of Muftis
Islamic banking – not Islamic	1. Rates could increase 2. Presence of interest 3. Some doubts
Products	1. Almost same as conventional 2. Broad array

Islamic Depositors (Interview-based themes)

Themes	Description
Product offerings	1. Broad array 2. Just like conventional bank products 3. Islamic in nature
Product usage	1. Depositors want to have a long-run relationship with banks 2. Most have current account and want to take home or car loans
Conception	1. Better conception

	• People having better knowledge of Fiqh 2. Poor conception • Profit is same as interest • Bankers were not able to explain • Bankers only tell when asked
Islamic banks – Islamic	1. Yes • State bank and regulators • Muftis 2. No • Confusions • No loss is shared ever • Some products might not be Islamic • Lack of disclosure
Satisfaction	1. Islamic motive 2. Services 3. Mark up
Preference	1. Islamic motive 2. Word of mouth/reference 3. Business reason 4. Service 5. Low service charges
Marketing	No effective direct marketing No strategic orientation within Islamic banks

1- Liquidity

Cash inflow vs. outflow

Liquidity is on day-to-day basis and our clients or customers also keep money with us on time basis. The cash flow we receive on day-to-day basis in current and saving accounts and likewise there are term deposits, and when customers need it, we are liable to give that to customers according to their demand. So we have cash inflow as well as outflow.

Liquidity is the money depositors bring to us, we maintain that and book that like to state bank or we invest somewhere and if customer comes and demands money prior to the predetermined tenure, how we fulfill this, this is work of policy making.

Liquidity is like when they close their account here and shift elsewhere or encash their products prematurely. If he has deposited fixed, he opts for early encashment. He break the agreement, car loan, house loan, it could be anything. If he breaks the agreement, problem would arise.

Deposits

Liquidity is the money depositors bring to us, we maintain that and book that like to state bank or we invest somewhere.

For bank deposit of customer in any shape whether in current account, saving account or in term deposit, all of this which comes to bank is liquidity of the bank. We consider big or small investor in it, all the money from one rupee to one thousand crore, all of the money of customers is liquidity for the bank.

Our customers come and deposit the cash, investments are somewhat different, that is being done thorough their accounts in shape of fixed deposit.

Liquidity is cash based or deposit based.

More customers/Popularity

Islamic banking is even being promoted in Europe. People are developing understanding of it, they observe the way it is operated, they see its authenticity and that is why it is getting more popular. That is why you would have observed that most of the banks in Pakistan, even multinational banks are doing Islamic banking like Standard Chartered Bank has come towards Islamic banking. What does Standard Chartered have to do with Islamic banking which is a multinational bank? Same like Faysal Bank, want to convert itself to a full-fledge Islamic bank. At this time there are few banks doing only conventional banking. Summit bank, Samba bank, Askari bank, almost all banks are doing some Islamic banking. It means that our people are observing it and its liquidity position is getting better in overall industry. Slowly things are improving from 2007 to 2012, Islamic banking has struggled a lot. After 2012 to 2016, you may say that now it is in growth stage.

Problems

Crunch but if financial crunch happens, any financial strains come because panic is created and people rush towards banks to ask for money, these are unseen factors.

Loss of trust from people

2- State Bank of Pakistan

Reserve requirements

Basically SBP has the cash reserve requirements and we have to maintain that. Market is competitive and State bank wants to ensure that banks increase their capital and in this context they provide a blueprint that you have to open how many branches, if it is Islamic bank how

many branches and there is a structure for ATM how many ATMs should there be. So, State bank bounds us.

State bank asks to maintain reserve with it, conventional bank has 13 bn, it was 10 but now it is 13 bn or 100 branches. They have kept Islamic banking a bit lenient, 6 bn to 7 bn reserve is to be maintained with state bank and they issue you license. Then your reserve is seen, as your reserve grows your branches are increased. That's how things work, on reserve basis.

Different responses on reserve ratio

Reserve ratio is 70:30. 70% is reserve with state bank.

When I started banking it was 6 billion, now it is almost 10 or 11 billion. These reserves are left with state bank and you can work against it.

You need to deposit 11 billion and you can use 40% of it. You can give funds, loaning anything you want out of that.

It is 60:40%.

Simply, every bank has to create that ratio of 2 ratio one for the reserves.

Strictness of SBP

If you would exceed that, state bank would intimate you. It would intimate for sometime and then would refuse you and there is a possibility that it levy some penalty on you.

You have to report to them on monthly basis, you are audited and there are surprise checks, State bank see mishandling of things. The foreign currency or remittances you receive are discussed with them on monthly basis, because they have to maintain your books, so that's how working is done.

We have leverages on that but these are for the time being, we cannot burst the cushion and if we do we have to pay certain penalties.

Reserve requirements and branch requirements are increasing

I want to add to your knowledge that liquidity requirement is not implemented in Islamic banking according to state bank prudential regulations. The capital requirement for the conventional banks used to be 10 bn and now it is 12 bn they would bring it to 16 bn and many of your Islamic banks have capital requirement of 5–6 bn. If that thing would be implemented to us, we would invest money. State bank also direct Islamic banks to promote their banking, so if we are promoting it, there is no such requirement as of now.

Facilitating Islamic banking: no License for conventional banks, no requirement on minimum branches, low capital requirements

Now State bank is only issuing Islamic license.

State bank asks to maintain reserve with it, conventional bank has 13 bn, it was 10 but now it is 13 bn or 100 branches. They have kept Islamic banking a bit lenient, 6 bn to 7 bn reserve is to be maintained with state bank and they issue you license.

Apart from that, Reserve of Islamic bank is 6 bn, you can say it is 7 bn. Base point is 6 bn, you get license to bank and in Islamic banking there is no limit of minimum branches up till now.

I want to add to your knowledge that liquidity requirement is not implemented in Islamic banking according to state bank prudential regulations. The capital requirement for the conventional banks use to be 10 bn and now it is 12 bn they would bring it to 16 bn and many of your Islamic banks have capital requirement of 5–6 bn. If that thing would be implemented to us,

we would invest money. State bank also direct Islamic banks to promote their banking, so if we are promoting it, there is no such requirement as of now.

3- Liquidity Management

Predetermined cash reserve limits

Bank has a predefined limit of cash reserve and the reserves are maintained with the state bank.

Bank cannot keep these reserves with it.

ATM requirements

We have to see out ATM for which 2 million cash is required and we have to manage that.

Foreign currency – Depends on availability, customer has to intimate prior

Then there is foreign currency, we deal in four of these i.e. USD, GBP, Dirham and Euro and we have to maintain that and there is branch's limit which is 7 to 8 million total limit in which we have to manage ATM, foreign currency and Pakistani Rupee (PKR) both.

For foreign currency, there is certain limit and we cannot cross that. For foreign currency it is on the basis of availability. We do not give required cash immediately.

Customer has to inform two days prior to withdrawal if the amount is large. And by large amount I mean it could be 10,000 dollars.

Prior intimation from big customer

Now we manage these, mostly major customers inform us one or two days earlier how much cash they want to withdraw. So, we then are able to manage this in advance so that they do not face any issue when they come to take the money.

Better customer relationship

There are many ways to reduce this risk, you have deposited your money in the bank, because our relationship with the customers is of such a nature that we know when he is going to purchase the property, when he is going to purchase the car, when he is going to invest where, we have idea before he had. So we try to cover this, that when you need to withdraw the payment we have it and we have to maintain the branch deposit level at that point.

The first thing I told you, service. Give him service, what he says is right, if you want to do business with him, you need to know everything about him, what his doctor or lawyer knows about him. Even the customer shares with you things that he does not share with his wife, then you are banker, he should have trust in you.

Regular cash requirement is experience based

Apart from that for daily customers, we have an idea on the basis of experience on who would withdraw what amount, it means we know the daily requirement. So we are able to manage that.

Regular cash could be arranged from other banks

Daily cash goes to head office

Apart from that, the cash deposit we daily receive goes to head office.

If we receive any payment late because there is a fixed time for shipment, like if it comes at 4:00, they take shipment of cash at 4:00 and if any customer deposits any cash after 4:00, that we take with us. We try to ship that as well but if the vehicle is not available we keep that with us and we have to insure that separately. It then is shipped next day.

Most transactions are not cash based

First thing is this, second thing is person who has deposited amount in current account can withdraw at any time and we do not need to stop him. Mostly transactions are not cash based, all the big amounts are on the basis of checks or pay orders. So we do not have to go into the liquidity and such things mean it has no risk.

Penalty on prior withdrawals from fixed deposit customers

And people who have fixed their deposits, the bank charges a penalty on premature encashment; if you have booked on 6% rate for a year, on second month customer comes asks for money for an urgent payment. Now we mitigate it like if he was given 6% rate, it comes to 2%. So customer thinks that loss is incurring and maybe that much profit could not be ascertained from there, so leave it (withdrawal).

Apart from that there are term deposits where customer fixes deposit for three years but sometimes people need money and they come to us and ask for it. Now different banks have different policies over it. Some people want to exit early so they have to pay penalty.

Yes such issues arise, like there might be some problem with him. We cover that in the way that we impose 5% penalty on that so we are able to recover our loss from there.

Banks have decided the 5% penalty. Already it has been intimated that if you withdraw before maturity, prematurely, you would have to pay 5% penalty.

Yes it is same on term deposit, *Ijarah*, and *Maskan*. If you take loan it is same. Suppose you take 5-year loan for car and you say that I want to pay it in three years in some final payment, you would pay 5% penalty for that because bank is to earn from customers. Bank would not pay from its pocket. So they minimize it.

Loaning on different maturities

And we do book for different maturities for one year, for six months, some are on five years and others on monthly basis so these things are managed like this.

Penalty on early withdrawal goes to charity

But in our case, Bank Islami case, there is no penalty. Where any penalty arises under the directions of State bank we bring it to under charity. Islamic bank bring such amount in charity.

Some people want to exit early so they have to pay penalty. There are so many NGOs and other places, we put this amount into charity and bank does not use it.

There is no such thing as penalty in Islamic bank. If a customer pays his installment late, he pays penalty in conventional banks. There is no concept of penalty in late payments. Amount received in this regard is counted as charity and is given to NGOs. Bank does not keep money with it. All the work being done on Islamic banking, they do not name penalty item as penalty, they give it to other organizations as charity and this agreement is signed before with customer. If customer would agree then we would give him the product and if he does not agree then it would not be done.

Building customer trust: money is secured

By providing good services, and this department I am representing, this department basically has responsibility to provide customer satisfactory level of services so that he remains confident that his money is secure. So that risk is mitigated.

Early withdrawals are scarce

People infrequently need money for something and it does not happen in majority of cases. Chances are rare. The contract is not broken until he has some urgent need, then it happens. And customer waits, even if he has need of money and some time is managed then he waits until the maturity to encash it.

It is very rare. Customer does this after due consideration. As you said, it is an emergency and you know emergency is rare.

Provision of services

We do promotion and provide services, nowadays the importance in banking sector is of service. There are larger banks who customers trust blindly: MCB, Allied, UBL, National bank. Customer does not see whether it is Islamic bank or conventional bank, if it is bank of government, it is going to stay. So customer goes to them and how can we lure their customers if they provide services. We do not have that level of branch network nor do we have products of that kind and we cannot quote those rates. In those banks, customers do not get services, so what we offer are services and by means of these services we increase our cash base. So we focus on services or you may say our personal links, like our acquaintances, friends and relations, word of mouth. Through these we increase our liquidity base.

Issues/problems – Taxes, competition

The largest issue nowadays in market is related to the Tax, it was not levied before, people have started withdrawing their cash and started investing in properties or started keeping it in lockers, bond of 10,000 and note of 5000 is vanished from the market. People have started keeping that in lockers. Property has boosted rapidly because people have withdrawn money even from current account. People think that we should invest in the property as we are not receiving anything and paying taxes.....If he was having 10 accounts now he has 5 and soon there would be two accounts. What I see for future of banking sector, in the end there would be five or six big banks in Pakistan, remaining would be merged with them. Because, as of now, competition is getting tough, customer is making demands because he knows that if this bank would not comply then another bank would. Money speaks for itself, people are getting money. People do not deposit it into bank and purchase property or cars, or importing China's products. So our major issue is competition because of which market is uncertain, second is tax.

Emergency mechanism to draw liquidity

In that we have to see for example we have a book of 100 million, and we have deposits of 100 million, so we can do 50 million financing on that. From 100 million we can invest 50 million in the market. We have to look to this ratio and this ratio sometimes is up or down the limit as our reserves are also in shape of gold, guarantees, foreign currency with State bank so it is not trust that much, 75% means that immediately bank has to strategize, if we have invested 75 million and we only have 25 million so we have to decrease this ratio. And those indicators are like, for example, we have 60 billion and we have invested 50 billion and our consumers still are demanding home loan, car loan or any other type of financing. So we have to see that either we

go for it or not. If we go for it, then we have to boost our consumers, so that we pick up money speedily so that we can invest out there. So it remains balanced, either we force consumer if he is financed.

IPOs or bond issuances

Overall, there are certain banks facing liquidity problems, then we go for IPOs, or we share some Islamic shares like Arif Habib has shares, we also issue bonds, either we go to IPOs or issue bonds.

Islamic banks have strong investors – no capital requirement problem

Mostly, in Islamic banking there are solid parties involved, so they do not have capital requirement problems. More or less you see Askari do not need money, Dubai Islamic bank is the largest bank of Middle East or even world's largest bank. They have assets in trillions. Same like Faisal bank if gets converted, they also do not need it, Al-Falah bank, UBL, Allied bank do not need it. So there are no liquidity problems.

4- Bank structure

Risk Management department

Every bank has got its own risk department. The responsibility of which is to mitigate risks related to deposits and financing. Every case is forwarded to them. Branch prepares the case like you come to us that you need financing so we would prepare the case, we will do your 'know your client', we will see your source of income and after seeing your earnings, so firstly we will do your pre-scanning and if you are eligible then that goes to the risk department. Then it is sent to risk department. Risk department then evaluates whether to approve or not because they have

track record of each customer and their methods of analyzing are also different, statement of clients is showing what inflow or outflow, its financials, all its track record, ECIB etc. is checked. Then they either approve or decline.

(Risk management department) Yes, it is.

Shariah Board

Our Shariah board does not let us invest or finance any non-Islamic thing. We send credit appraisal of many cases to Shariah but they do not approve that on the basis that it is not Islamic. They forbid us.

5- Marketing

Trend on Islamic banking

Every bank has opened Islamic window because mostly customers are moving towards Islamic banks. They are that dissatisfied with conventional banking, simply when you are getting something better you will choose that. See it is written in Quran about interest clearly, that it is forbidden. But, things are going on as it is satisfying you need but now mostly customers are shifting from that (conventional banking).

In recent past, Islamic banking concept has evolved. Time will come, within few more years, like 4 or 5 years, within ten years all banking would convert into Islamic.

Response is good. People are taking interest. See people who have tasted interest, they are not refraining from it. And people who do not have awareness if told are immediately compelled that I can opt for it. People come and take interest and now State bank is only issuing Islamic license. Conventional are stopped. You would be seeing that all banks are coming towards Islamic banks.

Opening Islamic windows. MCB, HBL and even National bank have done this. Bank Al-Habib, all have done it. They are coming and slowly would come to this. In Pakistan, the largest Islamic bank is Meezan, after Meezan is our number. Now slowly everyone is coming towards it.

Islamic motive

We just tell them that banking is same but the way is different. Rest is up to you that you come towards Islamic or conventional.

Products of all banks are same. There is no other attraction in that except it is Islamic and this is what we tell the customers who come to us.

Basically, customers are already convinced that we have done too much conventional banking and when we have a better alternative, why should we go for that. Here everything is responsibility of 'Mufti Saab' who has declared 'Fatwa'. So the liability on the head of the customers is eliminated as they have chosen the better. Now this is how much Islamic is concerned with the 'Mufti Saab'.

Being Muslims, customers like it as compared to conventional banking. There are certain things, like because it is not fixed, so we have to tell customers something, otherwise being a Muslim product is being liked by them.

Response is high nowadays, because people are moving away from conventional banking. That's why every conventional bank has dedicated a portion to Islamic banking.

Apart from that you meet so many people who say that we have opened a current account in a conventional bank, so we do not take interest. Actually these are the people, we also targeted these people as this is our target market. We tested how much our product is successful on these people. When we met these people we got same response, we convinced them that you are promoting conventional banking more. Because someone who deposits amount in conventional bank and receives interest, he at least make some damage to them, you by giving the money are saying that you earn on it and promote conventional banking. So we were also successful for this target market. Means we are successful, as I told you from 2007 to 2012 we were in struggling mode. At that time our deposits were not more than 30 to 40 bn and now from 2012 our book size have crossed 100 bn that means the struggle we did in 5 years was doubled and even tripled in four years means our products are good and people like those products. People understand it and invest in it.

Our marketing strategy is that we do purely Islamic banking, so we try to explain our products which are designed in accordance with the Islamic principles. Our strategy is also that we tell individuals that same thing is available in Haram and halal mode.

You can say that we are trying to promote Islamic banking in Islamic republic of Pakistan and bank Islamic and other banks.

It is satisfaction, we have a Shariah board with Muftis, and we follow them. It is a satisfaction that we are in Islamic country and we are unaware as to are we getting Halal thing or not? So because we are in an Islamic country and are mentally satisfied that we are getting supposedly

Halal meat so likewise when you come here you get a mental satisfaction. Apart from that, they have constructed a real Shariah board. So the largest thing is mental satisfaction.

Yes people come, Islamic banking was on 2% then rose to 6% and now in last two or three years it has captured almost 30% of the banking sector market share. People are coming and depositing their amounts. Customer base is improving, people are getting knowledgeable.

So due to concepts and Islamic principles people have peace of mind. If there are some shortcomings in the products that rate is less or we are deducting more changes, even then response is good due to peace of mind.

6- Conventional Marketing

Sales marketing department

Banking is a complete industry and in there, there is a sales marketing department which is wholly solely responsible for promotions of the products and services, particularly those which are different from others. Through these they attract customers and then they would have more business. And definitely through this the bank would receive revenue and network would grow.

Conventional media tools

Things that are highlighted are sold, this is very easy term. There are electronic media and many other tools they use for their marketing and then there is sales and marketing department.

Apart from that different promotions are done. There are advertisements on TV and newspapers.

Direct marketing

You need to go door to door to make people aware and then the internal thing or desire to be religious, when we touch that, people definitely get attracted towards us. They come to us.

So funds are totally based on our relations, now customer acts like a spoiled child and they require door-to-door services.

Every player has got its own share. There are investment banks, mutual funds. So one customer is being touched by 50 people.

Our marketing strategy is same that we are focused on three things i.e. share of mind, share of heart and share of knowledge. Bring the mind of people, if his mind comes, his heart would get involved and if you want to strengthen these two things, give them knowledge. So our marketing strategy is based on three things, Share of mind, share of heart and share of knowledge. This basically is our strategy.

We have walk-in customers, there are some existing customers, we also follow them up. We use market references, we inform them about new product arrivals and for walk-in customers we try that they open their account here and invest in our products.

Product development

Here is product, more and more products are offered to the customers, more and more awareness is provided to the customer and interest is given to the depositors.

In strategies, services come first and then there are your products as well. We are building attractive products. Your different types of products are actually almost same, there is a little bit variation.

Personal relations/references

We belong to marketing staff. We say that we come on the liability side. Now bank nowadays counts on references. The better and stronger the reference, the more beneficial it would be. This is the reason every bank has hired many people in marketing staff. There was a time when banks were going good, but now without marketing staff bank is not successful. Even big banks like HBL and National banks have also come to this (marketing). So funds are totally based on our relations, now customer acts like a spoiled child and they require door-to-door services. The bank successful in this survives. We in staff make sure that customers do not face any inconvenience. We provide them door-to-door service. Actually banking is, if you are my customer, I would have a relationship with you. You do not have anything to do with bank you have relationship with me. The better this relation is, the more satisfied you would be, otherwise you would switch bank.

So we focus on services or you may say our personal links, like our acquaintances, friends and relations, word of mouth. Through these we increase our liquidity base.

The first thing I told you, service. Give him service, what he says is right, if you want to do business with him, you need to know everything about him, what his doctor or lawyer knows about him. Even the customer shares with you things that he does not share with his wife, then you are a banker, he should have trust in you.

We have walk-in customers, there are some existing customers, we also follow them up. We use market references. We inform them about new product arrivals and for walk-in customers we try that they open their account here and invest in our products.

Better service

In strategies, services come first and then there are your products as well. We are building attractive products. Your different types of products are actually almost the same, there is a little bit variation.

We do not have that level of branch network nor do we have products of that kind and we cannot quote those rates. If those bank customers do not get services, so what we offer, we offer services and by means of these services we increase our cash base.

The first thing I told you, service. Give him service, what he says is right, if you want to do business with him, you need to know everything about him, what his doctor or lawyer knows about him. Even the customer shares with you things that he does not share with his wife, then you are banker, he should have trust in you.

Trust

There are larger banks that customers trust blindly. MCB, Allied, UBL, National bank. Customer does not see whether it is Islamic bank or conventional bank, if it is bank of government, it is going to stay. So customer goes to them and how can we lure their customers if they provide services. We do not have that level of branch network, nor do we have products of that kind and we cannot quote those rates. If that bank customer does not get services, so what we offer, we offer services, and by means of these services we increase our cash base.

Word of mouth

But basic thing is promotion or word of mouth. Mostly you go to a customer, and provide him information, customer nowadays is educated, he does research and goes into detail, then things

are discussed with you, there are arguments, justification, then he tells other people. Word of mouth you may say is more effective than marketing or promotion, it is better that you opt for word of mouth, what a customer says about you to others.

Issues in guidance

We definitely are not able to guide people like he could so we show Fatwa to people and in many things you go on Fatwas that what responsible have said you have to follow and leave your perception as it then goes wrong. Everybody has got his own knowledge and we are nothing in comparison to that. So customer response is increasing.

We train the staff, where staff presents themselves and explains the difference. These Fatwas are published.

Obviously, there are problems and sometimes people do not agree and raise negativities.

Every type of customer is in Islamic banking, there are customers who think that everything is alright here, some think that something is good and others think that things are the same.

Islamic banking Islamic

Islamic rate of profit fluctuates

Rate or profit is based on the last month's profit.

Second difference is, in conventional banks, you fix deposit your amount, they say that they will give you 1000 after one month and 1000 means they would give you 1000, but Islamic bank is based on profit and loss, we will not say to you that we will give you 1000. It could be 1100 or 900, it means the amount varies. We do not provide you anything fixed in writing. Likewise everything is different.

It is fixed in conventional banking. Suppose any conventional bank says to you that I will fix your deposit at 7% for one year and provides you monthly or whenever you decide profit on 7% basis. It could be monthly or on maturity. 7% is fixed. Tax deduction on the time of maturity is a separate issue. It is not fixed over here (Islamic bank) because we have to invest, being Islamic banking or Islamic culture we divide profits among customers earned over our investments. Now what customer has invested from 100,000 to any other amount, he would get profits accordingly.

Documentation and ways

All the banking is alike (Islamic or conventional) and apparently it seems all alike. A normal person cannot discriminate, he would say you take cash and they take cash as well; you finance car and they also do that so what is the difference. Change is in basic documentation, second is the way which is changed. We would not hand over you cash for anything, you say I want to purchase mobile, give me the cash, we would not give you cash for mobile, we would purchase mobile and sell it to you (Murabaha that is). Cash handling would not be involved.

There are various commodities like car, in home loans there are houses and land as well. All of these are in ownership of bank and afterwards people purchase it through a rental agreement. People are paying rent for that and not the fixed markup or profit. We didn't say that after five or ten years that much amount you would have to pay. So nothing is fixed, it is variable and there is element of rent in it. So we consider it Halal banking.

But it is fact that there is a huge difference between Islamic banking and conventional banking. The motive is different, let me give you an example, your money you give in current account is as Amanat and Amanat could not be used by a bank. That is not halal. In Islamic bank all the funds, in current saving and term deposit are received in kind of debt that it can invest the funds

anywhere according to the Islamic way. Bank would purchase the property or Islamic sukuk or bonds, it is not spent on stock market.

We use word 'tijarat' (trade), we use word of lease instead of financing, we use word of rental or partnership and our products are defined like that. These are the things, you would not like to go to the individual products, so these are our products.

I say to you that interest is purely Haram, let me define it clearly to you, that Nikkah and Zinnah are two different words, but in Nikkah when you write and sign, it's your responsibility. Thing is the same, you just proceed with the legal way. Just like that you see the same system that there are boards showing Islamic banking, there are cash counters but our wording is changed.

So if you are getting car you know that you are getting it in Halal way on rentals. If you are receiving some profit it is not interest, it is a variable profit which is your peace of mind so response to products is good because our concept is in conventional banking that you have deposited 100,000 and after one month you would get 500. We say that you have given us 100,000, you are in partnership with our board of directors so 100,000 is invested by you and board of directors has invested 100 million, so when these 100 million and 1 lakh earn profit it would be distributed according to the share. Secondly, we cannot finance Murree Brewery, so you cannot think that amount is invested at some wrong place.

Muftis

I was surprised and this was an interesting thing for that that these 'Muftis' are specialized from certain institutions. Like if you want to do MBA there are institutions for that, for example if anyone is going for master's degree, there is Lahore School of Economics or Lums. Likewise for specializations of Muftis, there are special institutions and to declare a Fatwa you need to study

for 30 to 35 years and when mufti explains and develops something, most of the people say that Islamic and conventional banks are one and the same things, but when mufti develops something he has studied that for 30 to 35 years and after that he is declaring the Fatwa. So that means when he has 35 years of knowledge on Islam, we cannot say on our one year or so of knowledge that Islamic and conventional banking are the same. So by looking at these things they have developed Islamic banking products.

We trade, so it's your peace of mind that at least you are not doing anything involving interest and at-least Muftis have given fatwa, you call Islam a complete religion, we say Quran a complete book so these products are developed after studying these.

I give a simple example, in London they sell out their church, we say that *Masjid* is home of God, I am giving example of how we explain it to people. So in a community where Muslims were more they asked that you sell us your church. They sold that out, I happened to go there, I wanted to offer prayer and I saw that it is church, I asked prayer in church? We went inside, there were arrangements, we offered prayers and returned home, now the thing is that it was looking like a church from outside but we offered prayer inside it. We cannot change building structure, it was same, when we offered prayer insider we prayed to God and we did not adopt the Christians way. So our strategy is like this that we have kept the entire environment of the bank the same, but our strategy is not like the church, these are of Muslims, Once you enter, you get the idea what the things are.

Not Islamic

Sometimes we get extra rates approved from our senior manager but it depends on the amount.

Banking is interest based, without interest there is no banking. It is wrong to say that interest is in conventional banking but not here. Interest is also prevalent in here (Islamic banks) and in there (conventional banks). The difference is that there it is fixed and here it is not fixed. Here it is floating rate. It fluctuates high and low. This is the reason on which Islamic banking is operating. Means in terms of if a customer is taking a loan from us, are you asking in that context? See, there is a rate KIBOR, the rate which comes from Karachi, bank offers some ratio above this rate to its customers. We offer 5%, 5.5% above KIBOR, so cumulatively it turns out to be 11%, 11.5% and it is market norm.

Products

- Products are same more or less. Auto lease, house finance. There are two types of saving. One is term deposit like the other banks and a normal saving account. We also facilitate in appliance financing for home usage. In long term we have insurance called Takaful. There is also a simple normal current account on which there is no profit and loss.
- We offer purely Riba-free banking where customers have day-to-day basic banking facility according to this Shariah law and apart from that other facilities like car financing or house loan and all of these things are purely offered on Shariah basis under the surveillance of State bank.

In products we have different types of accounts like current account which is on day-to-day basis without any limit, salaried person can have that current account, you can open it in old age, any type of businessman can open that. Apart from that we also offer saving account as I have told you earlier that we offer saving account under Shariah law. In that all of our investments are related to Halal business. We have a department which assesses

all of these investments according to Shariah law prior to the investment, so that there is no element of Haram or Riba in it and it is ensured. Along with this we have other types of accounts like for old age people, we have business plus account in which you provide certain free of cost services to business-oriented people who make large transactions. These services include free check books, pay orders as different payments are required by them. So these are the facilities which we offer. This was just cash inflow and outflow in banking. Apart from that we offer car loan, in Islamic term it is called Ijarah. In Ijarah we offer them according to Shariah law. There are various commodities like car, in home loans there are houses and land as well. All of these are in ownership of bank and afterwards people purchase it through a rental agreement.

- We have Maskan, this word indicates towards house financing, after that there is Ijarah which is car financing. After that there is current account and saving account.
- With reference to loan, there is car loan, house loan, insurance, then if they want to fix deposit which is from 30 days to 10 years plan. Maturity and profit ratio of every product is different. It would depend on time duration.
- Our products are the same. There are current saving accounts, we do car leasing and house financing. In accounts there are different products like current, saving, special saving and all of these vary in accordance with deposits. We have developed slabs, that in what slab you fall. In that you get pay order and check book facility free. But there is a limit on the amount.
- There are three types of products which deal with liquidity. Current account, saving account and term deposits. There are other things as well, like we see trade there is consumer but in there money is not received we have to pay for that. The liquidity we

accumulate, we earn cash on that basis. So the main thing is current account, saving account or term deposits. If you want further briefing so we have three types of current accounts, one is basic banking account, one is normal current account and one is our *Aasan* current account which is started on the direction of State bank in every bank. That is for normal people like fruit sellers, rickshaw drivers and household staff as their accounts are not opened otherwise like that ease is provided like this. In saving we have other categories like enhanced savings, special saving, normal saving, aasan saving. All Islamic banks have more than one type of current saving and term deposit accounts. One term deposits return would be good and others would be low. Term deposit has certain tenure. One is for month, other is for six month or for three month, one year, two year and upto seven years.

- One thing is products, our products are purely Shariah based.

Irrelevant

- That customer sometimes asks for their money early, bank basically is an institute offering services.
- I will tell you later in the detail how it is and why it is. That's why return is less and customer receives less benefit. There still are debatable aspects like Islami banks keep basic rate below the KIBOR. In Islamic banking they say that if you exclude all the Haram elements then it becomes Halal. Muftis have declared Fatwas on it, Mufti Taqi Usmani has fatwa on this. We definitely are not able to guide people like he could so we show Fatwa to people and in many things you go on Fatwas, that what responsible people have said you have to follow and leave your perception as it then goes wrong. Everybody

has got his own knowledge and we are nothing in comparison to that. So customer response is increasing.

- It is extended every year.
- First benefit or attraction to the customer is our services, in context of benefits we do not go beyond the limits set by the bank so there is no such attraction. Yes.
- Head office deals with State bank, when you start a bank and ask for license from State bank.
- So these things are as it is which you have to see.
- Definitely people used to consider that we should not go into any kind of Riba thing. So more or less they used to maintain their current accounts. Some people used to be attracted towards saving banks and this is also improving. Like who are offering Riba-free banking is a step towards that and that time is not far when there would be only Islamic banking in whole of Pakistan.
- Now-a-days people are coming and depositing their amounts. Customer base is improving, people are getting knowledgeable.

See things could not be 100%, but you can think that at least 90–95% things are right.

In that you say how do you want profit? I take one simple product, you need a car and you do not want to invest amount of 16–17 lakhs on a car immediately and you want to pay gradually and you want some profit on the amount kept in bank as to at least manage your petty expenses, or utilities of your office are managed or you are retired and want to have some money on your retirement.

Islamic Depositors (Interview-Based Themes)

Products

Offerings

- Banks are offering different products for example check book issuance, current accounts, fixed deposit accounts. Secondly I have discussed with my bankers about other products such as Ijarah, home financing and car financing. Also I know of Mudarabah and Musharakah as well.
- I know two major products of Islamic banks i.e. home financing and car financing. In fact the banks are not financing for home and car. The banks construct home and purchase car and hand over to customers for its use and ownership.
- Yes of course I know different products because of different commercials, like there is online banking. Besides that, bank deals with different loans like car financing, home financing etc.
- I am short-term investor because I deal with current account but in future if I use financing for car then I will prefer Islamic banking car Ijarah scheme.
- Well Islamic banks offer different products but specifically I don't know the names of such products. But in Islamic banks, Shariah-compliant products are offered e.g. Shariah car financing, according to Shariah investments etc. I think they also issue credit instruments.
- I know different modes of financing, such as Bai Muajjal financing, Istasna financing, Diminishing Musharakah, Ijarah etc.
- Islamic banking has different products but we do car Ijarah, home financing, laptop financing etc. We have these three basic products then the Musharakah and different

modes of financing come. Banks have seven booms in which all such financing is covered.

- I have an account in an Islamic bank but I have also visited different Islamic banks like two or three banks for information. They were giving the information that they are giving cars and homes along with motor bikes and they do not charge interest thereon just they purchase asset and give possessions not the ownership. The ownership is distributed and customer has to pay the rentals thereon.
- Banks are offering different products for example check book issuance, current accounts, fixed deposit accounts. Secondly, I have discussed with my bankers about other products such as Ijarah, home financing and car financing. Also I know of Mudarabah and Musharakah as well.

Usage

- Nowadays I am using current account of Meezan Bank. But in future I want to take car loan so I will only prefer Islamic bank and nothing else.

I am and will be a long-term customer and investor of the bank. I only will use the Islamic banking.
- Nowadays I am using current account of Meezan Bank. But in future I want to take home loan so I will only prefer Islamic bank and nothing else.
- Nowadays I am short-term investor of the bank but I am thinking of long-term investment with Meezan Bank.
- Yes I have saving as well as current account in Meezan Bank Limited.

- I am short-term investor but I will go long way with the operations with Islamic bank, you will see, sir, the Islamic banks will dominate very soon.
- I have current account in different Islamic banks and in two banks I have my saving account. But I am not availing different products as for example Mudarabah or Musharakah or alike.
- I am short-term investor but I will go long way with the operations with Islamic bank. Islamic banks services are infact good.
- I only want to deposit money in the Islamic bank so I am short-term customer and have taken different products like car financing, home loans etc.
- I am short-term investor as I am not following the Islamic mode of financing.
- The conventional and Islamic banks are offering healthy products at their own places and both the products are equally accepted. The customer of Islamic banking is not a customer of Islamic banking due to the product competitiveness but he is a customer due to his belief. Nowadays I am using Ijarah financing from Bank Islami Limited.
- I am long-term investor of Bank Islami. As I have already said that I am using Ijarah financing from Bank Islami.
- I am aware of a product called Musharakah. I myself have leased a car through an Islamic bank so I know about that too.
- I am long-term investor of the bank. As I have already said, I am using car Ijarah Financing from my Islamic bank.
- As per your information I have taken car lease facility from the Burj bank too and I have saving account with the same bank.

- I am short-term as well as long-term customer of Burj bank because I have saving account as well as car leasing for five years.
- Nowadays I am using current account of Meezan Bank. But in future I want to take home loan so I will only prefer Islamic bank and nothing else.
- Nowadays I am short-term investor of the bank but I am thinking for the long-term investment with Meezan Bank.
- I am using home loans and financing. They haven't given me finance but the bank is doing periodic payments and my home is getting ready.
- I am long-term customer of the bank as I am availing home financing for seven years.
- I only want to deposit money in the Islamic bank so I have information there of only. So I am using current account in Albaraka Bank.
- Nowadays I am short-term investor but I am thinking of taking advantage of car Ijarah from same Islamic bank for which I am a customer. I have taken information now I will deposit for car.
- Nowadays I am using current account of Dubai Islamic Bank. But in future I want to take car loan so I will only prefer Islamic bank and nothing else.
- I am and will be the long-term customer and investor of the bank. I only will use the Islamic banking not else.

Conception

Better conception

- But in both I think that bank is dealing with us and in return we are dealing with the bank. I will give you an example of car leasing. If I talked about conventional banking then

bank will finance the car and we will give the principle amount and interest thereon. The car will be registered with our name but in Islamic banking the car is not financed but the car will be purchased by the Islamic bank and the car will be registered in their own name and bank will give us power of attorney. We use the car and will pay the rent. This is the product difference.

- Basically in interest there is no risk of loss and it is considered fixed. For example if you have made investment with someone then that person will bear all the losses and you only have to enjoy the profit i.e. interest. But in profit there is equal chance of loss. i.e. you will gain profit and there will be equal chance of loss and you have to bear that loss as well.
- For example if we made investment somewhere and at month end or at end of year the business earned profit and such profit is distributed on profit sharing ratio or by any proportionate then such money is called profit. On the other side if loan is granted to someone and fixed amount is charged from him and there should be no risk of loss therein then it is considered interest.
- Basically in interest is considered fixed income or expense. But in profit there is equal chance of loss and it is not fixed. According to teachings of Islam you will gain profit and there will be equal chance of loss and you have to bear that loss as well.
- Literally, riba means “increase.” However, riba is commonly translated into English as “interest.” Riba is mentioned in the Quran. Most commentators agree that riba is a sum of money a lender claims from a borrower on top of the principal amount of a loan, as a reward for extending the loan, or for allowing more time for repayment. It does not matter whether the additional amount is small or large; even the smallest amount is still

riba because it constitutes an addition. The basic difference is profit is where there is a commodity on at least one side, and interest is where there is money on both sides. So you can't take money for money with extra. Similarly when two commodities are of a similar nature and they are sold by weight or measure then when exchanging them, any extra will be interest, e.g. rice, wheat, dates, etc.

- The originality of Islamic banks consists of the principle of profit-and-loss sharing between the provider and the user of funds. This notion of equitable sharing is a key element in the concept of Islamic finance as it is supposed to reflect the values of Islam. I am satisfied with profit orientation.
- The basic difference between interest and profit is that in profit there should be benefit as well as loss but in interest there is no concept of loss only there is profit and profit at some fixed rate. You also know that interest has fixed amount and is well known before but the profit is not known before and it always calculated after some specified period. After calculation there may be profit or may be loss. Both are equally admissible for the customer. Of course one thing is more in the interest that you are 100% confident that you will receive the profit only and there will be no loss.
- Conventional banks deal with interest and Islamic banks deal with profit. Now why is it so, I will differentiate between Islamic banking and conventional banking. The main difference between Islamic banking and conventional banking is that Islamic banking is focused on asset-based financing and conventional banking is based upon money as a commodity. Once again I would say yes, of course, Islamic banking operations are based on profits. Again yes this is practically happening. There is no doubt that the Islamic banking Shariah board members are very strictly evaluating this aspect and they do not

approve any financing if they are not satisfied according to Shariah applicability. The Islamic bankers cannot float any financing until and unless this is approved by the Shariah board members.

Knowledge of Fiqh

I know Fiqh and preaching of Islam. A common man say that Islamic bank is same banking as of commercial banking, only words are changed, but Islamic banking is real Islamic and common man don't know the Fiqh and preaching of Islam. Common man is ignorant. I can also give you an example. Prophet Muhammad (PBUH) said that one Kg of fine quality dates cannot be bartered against three Kg of low quality dates. So one person has fine quality dates which cost Rs. 100 and other person has low quality dates which cost Rs. 30 per kg. Now the fine quality dates holder will say to other person please give me one Kg dates of Rs. 30 and in return the low quality dates holder will say to other that you also give me dates reflecting the same cost. This transaction is Halal because it is properly measured on monetary grounds but the barter system is not Halal. Actually the people do not know such type of facts. If you look into history the non-Muslims were also at the point that Bai and Interest are the same things but Allah has made Bai Halal and has forbidden to take interest.

- There are some definitions that are there in Islam. If the commodity-based benefit is there, this is called profit but if specific time period is inculcated and specific percentage is applied then this is called interest. In profit the original amount will be invested in some business and profit-and-loss sharing will be made and there will be no time limitation and no fixed percentage will be applied. In addition to this, the lengthiest Verse

of The Holy Quran, also called Ayat-ud-din, is all about and against the mechanism of Interest. Allah has made perfectly clear in this Ayat that any person who takes interest and does not leave it, is at war with Allah and His Holy prophet.

Poor conception

Profit and interest are same

- In my point of view the word interest is replaced only with the word profit in Islamic banks. Now the question is HOW! In conventional banking the banker says that you should invest this amount and you will get this much percentage of mark-up i.e. interest but in Islamic banks they say that you will get the profit and you have to share the loss as well. But they don't clarify that loss or profit. Let me give an example of profit and loss. If banker says that you will get the profit of ten percent but the profit from that invest comes as eight percent then the bank consider this profit as loss but the customer think that this is also a profit. But bank provide still ten percent because if they will not do so then they will lose their customers. When this point comes then the Islamic concept of profit becomes vague and it becomes like interest. With such vague concepts, customer orientation is necessary.
- Basically Islamic banks offer profit and conventional banks offer interest in the name of mark-up. But technically they will be considered different but operationally if we observe, then through our observation it looks just alike.
- I don't have a very clear understanding of interest and profit but I have saving account in Burj bank and every month they give some amount which is considered useful for us. Such amount is of profit but it is at KIBOR rate so actually it can be called as interest or

so. If I am not wrong it is based on KIBOR rate and when such rate is applicable then of course the profit or interest is generated.

- When we go to the banks we enquire about the accounts available to the bank. The Islamic banks also tell which accounts they have but they made comparison with the conventional banks as the conventional banks have this account and similarly we (Islamic bank) have this account similar to conventional bank. This sometimes also reflects that change of name policy is there. Islamic banking offers car financing, laptop financing, insurance (for which they use word Takaful). In these financing the conventional banks say that they get mark-up and Islamic banks say that they get rent but the amounts and percentages remains same for both the banks.
- Sir, the main reason is this which I have told you. The other reason is the profit. If I give you my own example so I have invested (fixed) the amount in Bank of Punjab and in Dubai Islamic bank. Bank of Punjab have said to me that you will get 9.30% mark-up annually and the Dubai Islamic bank said that now we are partners and under Mudarabah agreement we will give you rent of 9.05%. So what is the difference? Apparently, only the changing of names.
- I will say it like this that I am committed with the HBL for the last three and half years and one year with Burj bank but when I made a comparison then it is observed that both banks take financial charges according to the KIBOR rate. The difference is, in HBL the installments are in decreasing trend but in Burj bank they are equal every month but both banks take financial charges; you can say it is interest or profit. Furthermore, look actually you are moving in a society or a culture. In ongoing society where conventional banking is dominating how can you avoid interest or you can say profit. But I can say that

the interest always increases in the conventional banks but in Islamic banking the interest or profit cannot increase yearly. I think Islamic banks used to adjust profits that satisfied me.

Bankers were not able to explain

- Of course, at two different times the banker discussed the Mudarabah and Ijarah with me but I haven't understood that concept. I discussed the concepts by asking different questions but could not understand. It may be due to that I was not interested to understand or the exact knowledge was not there with the banker and he was unable to convince me.
- There is no need of such information to be taken by any customer like Musharakah, Mudarabah financing, Bai Muajjal financing, Istasna financing, Diminishing Musharakah, Sukuk etc. These are needed when anyone wants financing with the Islamic banks. I only want to deposit money in the Islamic bank so I have information thereof only. But the bankers also do not give information of their own, until and unless the customer asks them personally.
- I am not very much aware of Islamic banking and its products because one year has passed in dealing with the Islamic bank but I have general information. But it is very clear that in Islamic banking there is no concept of interest and the profit-and-loss sharing is there and such profit is very much pure but in conventional banking when you invest money then of course you take interest.
- In conventional banking you straight away talk about interest. That is, at the deposit or loan financing this percentage of interest is levied upon. But in Islamic banking they talk

about profit-and-loss sharing. I have seen the profit-and-loss sharing of Islamic bank, I am unable to understand; it is very unclear and ambiguous. The main reason for lack of clarity is that in this country there are no proper disclosures regarding Islamic banking and its products. The most important thing is that if you (Islamic Banks) are investing some amount with anyone then you (Islamic Banks) have to disclose where that amount is invested. Basically there is no proper distinction between Islamic and conventional banking. If proper disclosure will not made then such issues arise i.e. in the last days the millions of funds were taken on account of Mudarabah certificated and by this amount the diamonds were smuggled from outside; the case was presented in National Accountability Bureau (NAB). Let me explain actual Islamic system; suppose you are taking loan from me of rupees one lac but I am not paying you the cash but giving you gold as for example two tolas and I will say that you will return it to me after one year. When you return that after one year then you will return two tolas gold; either that was of ninety thousand or one lac ten thousand. This concept is called profit-and-loss sharing. What type of clarity is there in Islamic banking? This is the main issue.

- Actually in my point of view, interest is haram, never found in Quran anywhere. The only element said in Quran is that the person who will do the business of interest will have a battle with Prophet (PBUH) and with Allah. Battle is battle. I think Shariah Law is followed as said by Islamic bankers. On every level, every Alam is not liberal, it is necessary that he will be representing any one school of thought. So if you think broadly then you will understand many more things. I do not give favor to Islamic banking but I cannot change it and cannot break it down.

- Frankly speaking I must say that I haven't seen any Islamic bank that can guide the customers correctly and convince them that such products are in accordance with the Shariah or not. The bankers must have to inform what these certificates are saying. Unfortunately our bankers do not know the Shariah-compliant product rules and regulations. When we ask them whether Bai Muajjal is operating here they simply say that we have to check whether we can provide you or not. In this way a customer can observe the black area that the employees themselves do not know about the products. Ultimately, how people will gain confidence that here the Shariah board applications and intentions are available or not.
- The bankers only know the information which is discussed with them at the time of their appointment but if detailed discussion is made with them then they answer less. This is because they have some orally learned sentences which they tell to all customers i.e. we have Shariah board, we do not give interest but give profit, we share profit and loss both, we share risk as well etc. and when you say to them that I want to invest two million and tell me the rate then they will tell you the rate as well, then if the rate is fixed and they have told that rate, then where is the Shariah standing then in Islamic banks?
- There were no specific intentions from them. They say please open your account with us then if feasible then we open the account with them. But if we do debates with the bankers then they have no depth of information but they only say that we have Shariah board, we don't do the business of interest and we share profit and loss with the customers. If we ask them will you give us this fixed rate, then is this not interest based? In response to that they (Islamic bankers) say we will give you from our (bank) profits.

- Actually when I opened the bank account in Dubai Islamic then the manager was Mr. Shahid and there I discussed with them the difference of Islamic and non-Islamic banking conditions but they did not give satisfaction to me, so I haven't made any financing there so I didn't discuss the other terms with them.
- Actually Islamic bankers have good attitude and they give briefings of their products with open arms. Also they have good motivation skills for persuading the customers.

Islamic banks Islamic?

State bank and other regulators

In my point of view certain restrictions are imposed by SBP and the Islamic banks must have to follow them but the authorities and powers the bank owns by itself, in such authorities and powers the bank always follow Shariah Law because they don't make any policy before consulting with their advisors. I have made a lot of discussions with different Ulmas and scholars. They satisfied me and hence I have opted for Islamic banking.

In nutshell with the passage of time many improvements will come but still Islamic banking products are competitive. The Shariah advisory board has main and important role. They have to give assurance to SBP when SBP do the audit. Without their assurance there is no Shariah compliant.

Muftis

I haven't nay detailed knowledge about Shariah Law but in my point of view Meezan bank always follow Shariah Law because they don't make any policy before consulting with their

advisors and Mufti Sahayban. I have made a lot of discussions with different Ulmas and scholars. They satisfied me and hence I have opted for Islamic banking.

I thing I must say that this particular question cannot be asked from a customer. WHY? I will give you my example that when I entered Meezan Bank, I asked the banker: how will you say that these are Islamic products? He said that these are the certificates signed by Mr. Taqi Usmani and Fatwa is taken thereon therefore these products are all Islamic. But my question is how you can be assured that the certificates are original and signed by Mr. Taqi Usmani or the products are fulfilling the Shariah.

After the experience of two years I understand that a bank in which Mr. Taqi Usmani is engaged is Islamic bank. This is my sincere understanding. In fact if we talked about in true spirit then there is certainly difference between Islamic and conventional banks. As Islamic bankers say that they do not deal in interest so I have made investment therein. Sawab or Gunnah Unn kay zimmay.

I have discussed with different customers the concept of Islamic banking. They told me that only the product names are changed, the rest is same as conventional bank. Giving a comment is very easy. It is just like that at the time of slaughter of hen, if Takbeer is not said then it will be haram and if Takbeer is said then it will be Halal. Why people not say that this is same thing....! In my point of view the people who have approved the system of Islamic banking are far more qualified and knowledgeable as compared to general customer. If any general customer has the knowledge equivalent to a Mufti and then he comment then understanding made that he is debating knowledge fully. But in the absence of such knowledge a general customer can give comment but this will be not his research. As far as this thing is concerned that KIBOR rate is used by Islamic banks so I will say that any one base is necessary for doing a specific activity. The whole

country is running on KIBOR and Islamic banks cannot ignore that rate but they (Islamic banks) are not totally dependent on KIBOR. They used their profitability and cash flows for the management of their operations.

Generally speaking, I personally know a fact that my knowledge is not equivalent to Mufti and when a Mufti give Fatwa that this is very much in accordance with the Shariah and of course Allah has given him knowledge and he also accept the responsibility and such Fatwa is forwarded by an Alam like Mufti Taqi Usmani from whose knowledge the Malaysian Banks and other foreign banks are taking benefits, then we have to believe him but I don't say this that trust him blindly but certain beliefs should be there upon him. Of course when something is in the phase of primer then different discussions are also made thereon and that also has certain limitations but we have to observe that, in aggregate context, thing is better or not.

Apparently, it seems that the Islamic banks are following Shariah laws. Islamic banks must have to follow them but the authorities and powers the bank owns by itself, in such authorities and powers the banks always follow Shariah Law because they don't make any policy before consulting with their advisors.

Confusions

Bankers are not able to explain. (Refer to 2.1.2)

Banks do not share losses

- Actually conventional and Islamic bank products are the same, only with the difference of names. The Islamic banks have no true spirit because we have not heard from anywhere that Islamic banks bore a loss and such loss is shared with the customer also. If

these are true Islamic then why don't they share the loss with the customers also or do they (Islamic banks) do such an efficient business that they never ever suffer loss.

- But if you say Islamic banking then there should be loss too but the customer never attains a loss, so which type of Islamic banking is this! Islamic banks do businesses under Musharakah and Mudarabah. Basically Musharakah is an Islamic financing technique whereby all the partners share in equity as well as management. The profits can be distributed among them in accordance with agreed ratios. However, losses must be shared according to the share in equity. And Mudarabah is an agreement between two or more persons whereby one or more of them provide finance, while the others provide entrepreneurship and management to carry on any business venture, with the objective of earning profits. The profit is shared by them in an agreed proportion. The loss is borne only by the customers in proportion to their share in total capital. But if you see the applications of these concepts then where is the loss, who bears the loss; no one bears the loss sir, so are these products truly Islamic?

Some products might not be Islamic

- I must say that the Shariah law is not fully applicable to the Islamic banks because they all are doing business of money and funds. It is possible that some product represents the Shariah law but I am afraid that all the products are not Shariah compliant. Another reason may be that there is small networking of these (Islamic) banks and they have less branches. As for example there is a small town in the way of Gujranwala named as Saadoki. In this town there is only one bank and that is MCB, if Islamic bank branch is opened there then it can do good business. I have never met with the Shariah board

members but in GC University our teacher of banking was very experienced and he told us that he has been advisor of Shariah board in UAE but in his words this all is a bribe and people give deception in the name of Shariah. How much of this is correct I can't comment thereon.

- Islamic banks are not different from other financial institutions in terms of their legal modalities, constitutive structures, objectives and means of achieving those objectives. The only difference lies in their description as Islamic. The Islamic banks have enjoined on themselves to conduct their affairs within the limit of the rulings of Shariah and to comply with its overall objectives. This definition of Islamic banks would make our approach easy as we embark on the research into the success factors of Islamic banks as financial institutions. It must be realized that maximization of profit is the objective of the highest priority for all investment institutions created by private individuals. Consequently, all private sector financing institutions have one fundamental objective: to make as much profit as they can.
- I must say that the Shariah law is not fully applicable to the Islamic banks because they all are doing business of money and funds. It is possible that some product represents the Shariah law but I am afraid that all the products are not Shariah compliant. Also I have never met with the Shariah board members. Nobody has given me their information in my business banks.

Lack of disclosure

I know little about Islamic banking products like Musharakah, Mudarabah financing, Bai Muajjal financing, Istasna financing, but I don't know about Qard-a-Hasan. But I have studied the court

decision of December 31, 1999 of Shariah Court Supreme Applet bench about the elimination of interest. A Meezan banker came to me regarding giving me information about insurance i.e. interest free; he was giving the same information as was written in the court order. In fact the information was correct but the practices are somewhat ambiguous. Basically the differences in practices are that the Islamic banks say that they invest in some business but they do not inform us that what type of business it is. Either this business is Halal or haram. This is the main controversy.

Clearly speaking, you are exploiting on the basis of Islam. You are using the name of Islam and therefore without thinking, people are investing in Islamic banking. Think how many people are educated, how many people know banking and how many known Islamic banking. This is just exploitation and nothing else. You know in Saudi Arabia, Qatar and UAE only conventional banking has kept going. First of all, for an improvement in Islamic banking it is necessary that proper disclosures should be made.

Actually I think that the Islamic banking products are not completely in accordance with the Aahadis and Quran and this I heard from many customers. Actually the contract which is signed by the customer and bank contain different provisions of profit percentage or risk and return that creates ambiguity in the Islamic banking products. Yes, Shariah boards are in existence in the Islamic banks because two to three times I have seen them in the bank to compile the Islamic audit but they never discuss details with the customers and they hand over the customers to the bank staff.

Satisfaction

Services and riba-free quality is the major satisfaction.

Islamic motive

Of course one major element is of profit sharing instead of interest but other factors that have attracted me are the services offered by Islamic banks.

Yes of course I am satisfied with the profit offering by the Islamic banks because it is fluctuating and not fixed and ups and downs are there but I am satisfied that this is Halal.

One thought in the back of the mind is that when we use Islamic banking then we will be safe from interest and interest factors, this satisfies me a lot. This is the main reason and they advertise the same thing.

I am satisfied with the profit because it is riba free. Interest-free profit more or less is acceptable to me and I am very happy therefore.

In my point of view the modes of financing are derived from the history of Islam and these are very much similar and correct. This option really satisfied me a lot.

Yes of course I am satisfied with the profits offered by your Islamic bank because they are riba (interest) free.

Yes I am satisfied with profit orientation of the bank. I can explain it like this, in conventional banks only one time audit is done but in Islamic bank there are three audits in one year and molvies come from Karachi and they listen to the concepts.

I visited the Bank Islami and Albaraka Bank to get information. They told me that they made ownership on sharing basis. And they take rentals instead of interest. A mutual purchase agreement is made. This factor of sharing and prohibition of interest provide me very satisfied.

Of course I and my family members are very much satisfied because if they were not satisfied then we wouldn't have accounts in Islamic banks. So we are satisfied with profit-and-loss sharing.

Dear sir, option is that the Islamic banks cannot show you all the records, i.e. where 10,000 of yours is invested or where next 50,000 is invested. I am of the point that if you have trusted an organization, then you have to trust them fully, this is also preaching of Islam. If the Islamic banker is saying that they are investing money in some business and the interest is totally banned therein then we have to trust them. For example, they don't give you a loan. If you want to make a home, then Islamic bank will say that they will construct home by themselves and will handover home to customer and will receive the rent of home and principle amount thereon but they will be owners of home not the financiers. So in my point of view I can say that Islamic bankers are giving profit not the interest and nothing is proved, also that they are offering interest so I can say that their profit is correct and I am totally satisfied with the profit of Islamic banks. This factor also attracts me a lot for making investments in Islamic banks.

Services

Of course one major element is of profit sharing instead of interest but other factors that have attracted me are the services offered by Islamic banks. At one time I have bank accounts with Bank Al-Habib and HBL but the best customer services I have ever received are from Meezan Bank. The attitude of the bank officers is very good. Their behavior is very good. They facilitate you a lot. Really my experience with Meezan is very first class. One more thing is that they are always ready to provide services, if I need check book, bank statements or other services they always cooperate. The most important thing is if there is any transaction then they always ask whether the bank has to honor it or not, so a security element is also there in Islamic banking transactions.

The Islamic banks which I am related to give me due protocol and deal with me as a priority customer even if I contact to a call center so I am satisfied by my Islamic bank.

Yes of course I am satisfied with the services of Islamic banks. Actually Islamic bankers have good attitude and they give briefings of their products with open arms. Also they have good motivation skills for persuading the customers.

I have selected Meezan Bank because they do not conceal the facts and they properly guide their customers about their alternatives and investment. Also they have a good attitude. They provide a complete policy guideline and the required timelines. Also one more reason is that they try to retain the customers and the customers are considered to be the most valuable resource for the bank.

I am very much satisfied with the services provided by the bank. The bankers, infact, give you attention, they behave professionally etc.

I am satisfied with the services of Islamic banks because they give briefing very efficiently rather you can say they greet you in good manner and facilitate you nicely.

As per your question both banks, Islamic and conventional, are caring enough. But genuinely a customer observes which bank is giving good and timely services to him. I am telling you a truth that my major transactions are done with Burj Bank and I do not go personally to the bank but all the communications are done on the telephone such as checks collections, clearing, dishonor of checks, bank statements etc. But such services are not there in majority of conventional banks. So I am satisfied with the Islamic banking.

Very simple facilities are required and give satisfaction, i.e. when our official goes to bank for money deposit then he should be honored and his work should be performed as a priority, if any online transaction is made or any other person online to our account then there should be some

system that we should receive an alert at once. If there are any clearing checks then they have to send them to clearing on the same date, even if it is 5 o'clock in the evening, but problem is that after 3 pm if any check is sent to the bank for clearing they say that the check will be sent for the clearing the next day.

Of course Islamic bank welcome with open arms because banks need money and hence they have to do the warm welcomes and greeting. This is a need to run the business. Therefore I am satisfied with the services offered by my bank.

Some Islamic banks may pay little attention to the quality of services they offer to their clients especially if such banks enjoy a position where they can exercise some monopolistic power in the market. Many Islamic banks were once in this situation when they were acting alone in the Islamic financial services market. Today, however, the monopolistic position is weakening because of the multiplicity of Islamic banks in many countries and the entry of conventional banks into the Islamic finance markets.

Yes I am very much satisfied with the services of Islamic banks. They are good facilitators to their current and potential customers.

Of course one major element is of profit sharing instead of interest but other factors that have attracted me are the services offered by Islamic banks. The attitude of the bank officers is very good. Their behavior is very good. They facilitate you a lot.

In my opinion improving the working environment and making it comfortable and enthusiastic for the bank customers for their investments and daily transactions.

Raising the quality of banking services depends on improving three elements: correct banking professionalism, knowledge of clients and establishing personal rapport with them. These satisfy a customer as well as me.

Professionalism I like of the Islamic bankers because correct banking professionalism is the first point of departure for creating confidence in the bank and its employees. Improving professionalism therefore centers on improving the bank employees' knowledge and perfection of their banking job, such that anyone of them can offer a professional, brief and accurate explanation of all banking services that the client may have in mind. It also focuses on the staff being able to carry out a client's needs quickly and accurately, which would make the client give generously her confidence to and rely on the employee, and consequently on the bank itself.

Mark up

Another thing that I want to mention is that Bank of Punjab has a mark-up rate of about 9% and AL Baraka bank (this is also an Islamic bank) has profit rate of almost 6% so profit rate is also two, three percent less and things are also going the same, then what is the attraction for the customer?

The factor that satisfied me is strong concern in the investment department to realize for investors – depositors or shareholder – a rate of profit higher than other banks that operate in the same market serviced by the bank, especially other competing Islamic banks.

As such I am not requiring many services from the bank. Generally in organizing the current account I am satisfied with the bank services offered by the bank. Secondly, bank is providing online services and hence these services are very satisfying.

Preference of Islamic banks

Islamic motive

Basically interest is riba “sood” and profit is a more linear term that attracts a Muslim for investment. People generally prefer profit that if they invest widely then it is important for them to use profit from the bank instead of interest.

Actually sir I haven’t seen in commercial banks any risk sharing and profit-sharing element. The commercial bank only forward all risk towards customer and bank only need profits. Therefore such banks are only promoting interest. Islamic banks are based on profit-and-loss sharing along with sharing of risk therefore they are not promoting interest-based culture and profit sharing is Halal in Islam so I have selected the Meezan bank.

In my point of view I can say that Islamic bankers are giving profit not the interest and nothing is proved also that they are offering interest so I can say that their profit is correct and I am totally satisfied with the profit of Islamic banks. This factor also attracts me a lot for making investments in Islamic banks.

Because it is interest free (look like) and for short-term basis it is a good bank.

As I have already said, there is no doubt that the Islamic banking Shariah board members are very strictly evaluating this aspect and they do not approve any financing if they are not satisfied according to Shariah applicability. That’s why I have chosen Bank Islami for investment.

Steps should be taken by the banks that they become Islamic. It is only possible when the Shariah board and ulama become active and made all transactions according to Quran and Sunnah. The amounts deposited should be invested in real businesses and details of such businesses should be disclosed to the customers. After a year or two or after six months as the case may be, accountability should be made. If the profit arises then distribute it and if loss is there then such loss should also be shared. If this exercise is implemented then every person would automatically be attracted towards the Islamic banks.

Most people nowadays are irritated by conventional banking and they prefer Islamic banking and they feel that Islamic banking is good and interest free, as I am, because it is not Haram and people know it. There is a huge number of customers of Islamic banks.

Very simple, I think its interest free and sharing risk of profit and loss as well, hence it is considered Halal.

Secondly its operations look like Islamic and are far away from riba, interest transactions.

Apparently, it seems that the Islamic banks are following Shariah laws and teachings, because in commercials of Islamic banks there is a tag line that also reflects the same.

The main reason is the Islamic banks are Riba free. Secondly, at investment the money-to-money investment is not made. Money to asset investment is made.

As we live in Islamic state and hence we are Muslim so we have to do investments without interest because interest is haram. Islamic banks provide profits but the conventional banks provide interest therefore we have to go towards Islamic banks. Another trend that I have observed that nowadays people are more inclined towards Islamic banks. Now people have started to make negative remarks towards conventional banks. I also think that same may be happening in Islamic banking also, i.e. fixed percentages or fixed profit. But as the Islamic banks give light that this banking is Halal so people believe them, and so am I. I invested there because I don't want interest upon my investments.

Word of mouth/reference

Basic reason for choosing the Islamic bank is that my whole family has different accounts in only Islamic banks, therefore I prefer Islamic bank only. Secondly, its operations look like Islamic and are far away from riba, interest transactions.

I had a reference at that time so I have leased a car for my brother-in-law. Instead of this reason I have no other special reason. Also I have not taken it seriously that it is an Islamic bank or conventional bank because interest is charged on both banking financing, i.e. Islamic and conventional.

Business reasons

There was no specific intention about opening an account in the Islamic bank but only I gaze at my own moderation. I have business set-ups in Karachi, Peshawar, Quetta and in different cities where any bank give us exact facility then I open account in such a branch. We also see in which bank our customers have accounts so we open accounts in those banks so that amounts credits should not be delayed.

I have selected the Islamic bank because it was near to my business place and the bank facilitates me in such a way that they collect and pay me at my business place and I don't have to go there to the bank.

Service

Personalizing the banking services: by that we mean making banking services individually tailored to every client such that he feels a personal link with the bank he deals with. Raising the professional level of employees who deal directly with clients such that they can offer professional services quickly and efficiently and gain the client's confidence. Such things are found in Bank Islami that attracted me towards Islamic bank.

Of course one major element is of profit sharing instead of interest but other factors that have attracted me are the services offered by Islamic banks. At one time I have bank accounts with

Bank Al-Habib and HBL but the best customer services I have ever received are from Islamic Bank. The attitude of the bank officers is very good. Their behavior is very good. They facilitate you a lot. Really my experience with Dubai Islamic is very first class.

I have selected Meezan Bank because they do not conceal the facts and they properly guide their customers about their alternatives and investment. They also have a good attitude. They provide a complete policy guideline and the required timelines. Also one more reason is that they try to retain the customers and the customers are considered to be the most valuable resource for the bank.

Islamic banks prefer their clients and hence this thing attracts me a lot.

Low service charges

In my point of view the Islamic banks should think that they should charge less. The customer should know that he is not paying too much on Islamic products. Just if I say that I take financing from Standard Chartered Bank and I have to pay one lac fifty thousand more for my loan then I will think once before going in transaction. If Islamic banking is charging less then I will take the option of Islamic bank. It is necessary for the Islamic bank that whatsoever they charge should be less and within limits. Actually our society is like this, that they might have no issue with the interest.

Marketing perspective

No effective direct marketing

But the bankers also do not give information of their own, until and unless the customer asks them personally.

Yes, of course, sir. If you observe that every bank is providing the same quality to the customer. Again you will observe that the service quality of Islamic banking is far more than conventional banking and Islamic banks are less in number. Basically in this area the main banks are Meezan Bank, Burj Bank, Dubai Islamic Bank which is working effectively. I want to say clearly that religiously factors are important but the accurate awareness of Islamic banking products is very much needed. If you say quality, then quality is very adoptive in Islamic banking and more than commercial bank, but problem is that awareness is not widely spread by Islamic banks. Think that if a potential customer, especially Muslim, does not have awareness of products, then how can the Islamic bank have potential in the economy. It is also a fact that Islamic banks can't go long on the basis of religious beliefs and concepts.

I just want to say that if you want more capitalization in the Islamic banks then it is very necessary that Islamic banks should present themselves very sharply because I have observed that the Islamic bank is very less commercialized as compared to conventional banking.

A common man is of the point of view that in Pakistan no bank is such that it does not take interest. The very first thing is that the Islamic banks have to clear this thing. Secondly, they have to commercialize very efficiently and effectively. Thirdly, you have to inform a common man how Islamic bank is Islamic. You have to give a clear picture. Nowadays people know that Islamic banking is going on but they don't know what Islamic banking is actually doing. So you call it as the Islamic bank but it is in the dark. The Islamic banks should work hard on how this system should be enlightened.

But it would be great if seminars and/or workshops were arranged so that we would know the differences of the products because if we are ignorant of the concepts (as is soundly manifest) we

will be unable to be part of the Islamic banking system. Basically, it is the society, which is not presenting or portraying the actual picture of the system and is not supportive to Islamic banking. I have information thereof only. But the bankers also do not give information of their own, until and unless the customer asks them personally.

Knowledge of clients is based on continuous relations with them, which is, to some experts, the most important managerial rule: Success in banking services means the ability to interact with and relate to the client's desires, anticipate her wishes, and offer services that are specific to these desires and wishes.

No strategic orientation within Islamic banks

As for example if you switch on your TV sets then UBL and HBL attract you very differently but in case of Islamic bank they only say "SOOD SAY PAK BANKING" and it is not sufficient information for a common man.