LIQUIDITY RISK ANALYSIS AND PROFITABILITY OF PRI

by Mohammed Junyeed

United International University

QUEST FOR EXCELLENCE

INTERNSHIP REPORT

ON

LIQUIDITY RISK ANALYSIS AND PROFITABILITY OF

PRIME BANK LIMITED

Prime Bank Limited
a bank with a difference

INTERNSHIP REPORT

ON

LIQUIDITY RISK ANALYSIS AND PROFITABILITY

OF

PRIME BANK LIMITED

Submitted to

NUSRAT FARZANA

Assistant Professor

School of Business & Economics, UIU

Submitted by

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ID : 111-133-138

Date of Submission: May 20, 2018

UNITED INTERNATIONAL UNIVERSITY

Preface

This internship report is the concluding formalities of the 'Internship Program' for the degree of *Bachelor of Business Administration* of United International University (UIU), Dhaka. This report has been prepared as per academic requirement of UIU after successfully completion of 3(three) months internship organized at *Prime Bank Limited (PBL), Pallabi Branch* with the view to make acquainted the students with the realistic implementations of the knowledge provides the theoretical aspects of practical life.

It is my gratification and great privilege to submit my report titled "**Liquidity Risk Analysis and Profitability of Prime Bank Limited**" of Prime Bank Limited" at Pallabi branch during my successful internship period from *5th February'2018 to 5th May'2018*.

As a presenter of this report, I have tried my level best to gather as much as acceptable information to enrich the report while working at Pallabi Branch, of PBL. It was a fascinating experience to work there and it has enriched both my knowledge and experience.

However, there might have problems regarding lack and limitation in some aspects and some minor error such as syntax error or typing mistake or lack of information. Please pardon me for mistakes and errors.

Mohammed Junayed

ID No: 111-133-138

Program: Bachelor of Business Administration (BBA)
School of Business & Economics
United International University.

Acknowledgement

The completion of this report is matters of great feeling of accomplishment. First, I would like to express my gratitude to omnipotent and almighty Allah, whose invisible guidance helped me to complete this report. Although, time was very limited for getting the sufficient knowledge about all of banking service, but the short experience that I gathered as an internee, in *Prime Bank Limited* on *Pallabi Branch* an asset for all the time to come in my life.

I take the opportunity to express my deep sense of gratitude of my reverend supervisor **Ms. Nusrat Farzana**, *School of Business and Economics, United International University* for her invaluable suggestions and guidance during the study period that has greatly inspired me to make the report to a worthy one.

I am highly thankful to Prime Bank family for their continuous support and valuable guideline for my internship and accomplishing my internship report. All of them are very frank and helpful exception. I could not think a single moment that I am a student of internee in that bank they help me as his employee. Besides, I have special appreciation towards following resource person for helping me:

▪ Md. Walidul Islam, Assistant Vice President & Head of Branch
▪ Md. Atiqur Rashid First Assistant Vice President and Manager Operation
▪ Md. Nasim Goni Chowdhury, Assistant Vice President and Ex. Manager Operation Pallabi Branch
▪ Saiful Haque Md. Humayun,   Senior Executive Officer ,Credit In-charge
▪ Farjana Haque Jesmin, Senior Executive Officer
▪ Shirina Akter , Senior Office
▪ Samaun Tauried, Senior Officer
▪ Most. Nargis Akter, Senior Officer
▪ Kamrun Nahar, Senior Officer
▪ Md. Mainul Islam, Officer
▪ Md. Sador Uddin, Junior Officer
▪ Irin Rahman, Junior Officer

Finally, I want to express my deep gratitude to my parents and other family members and remember my friends whose enormous helps assist me to complete my report.

Letter of Transmittal

20th May 2018

Ms. Nusrat Farzana

Assistant Professor

School of Business and Economics

United International University

Subject: Submission of Internship report on "Liquidity Risk Analysis and Profitability" of "Pirme Bank Limited".

Dear Madam,

I am submitting my internship report titled "Liquidity Risk Analysis and Profitability of Prime Bank Limited" as partial requirement of internship program under BBA curriculum.

I would like to thank you for assigning this report as it provided me with the opportunity to venture into the real life scenario and to broaden the horizon of my understanding on how syndication is arranged and all the work that goes into it. I sincerely hope that my work will come up to the level of your expectation.

Hope that you would be very delighted to accept my report and I welcome your query and grateful to response them

Sincerely yours,

……………………

Mohammed Junayed

ID No: 111-133-138

BBA (Major in finance)

United International University

Letter of Acceptance

This is to certify that **Mohammed Junayed**, ID No # 111-133-138, a student of *Bachelor of Business Administration, United International University* worked under my supervision. His Internship placement is at *Prime Bank Limited, Pallabi Branch*. I am pleased to state that Mohammed Junayed worked hard in preparing this report and he has been able to present a good picture of the concerned organization. The data and findings presented in the report seem to be authentic.

So far, I know Mohammed Junayed possesses a good moral character and pleasing personality. I wish him success in life.

……………………………….

Nusrat Farzana

Assistant Professor

School of Business and Economics

United International University

Declaration

I hereby declare that, the internship report on "Liquidity Risk and Profitability" of Prime Bank Limited" includes my own works pursued under the supervision of Ms. Nusrat Farzana, Assistant Professor, Faculty of Business and Economics, United International University.

I further affirm that the report is original and no part of this report is taken from other report or book. This report is only use for academic purpose.

………………………..

Mohammed Junayed

ID No: 111-133-138

BBA (Major in Finance)

United International University

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Executive Summary

In the present-day, financial institutions like banks play a dynamic force in the economic development of a country and research, survey and many activities are so significant to enhance its working outcomes. A bank offers different types of financial resources and at the same time, act as a reliable institution for stakeholders.

The purpose of this report is to find out the liquidity risk of Prime Bank Limited and how liquidity risk influence bank's profitability as well as performance. All the data are collected from Prime Bank's annual reports, notes, website and analyzed the 15years data (Year 2003-2017) by using 'Pearson Correlation Matrix and Linear Multiple Regressions'. However, analysis based on, relationship between liquidity risk indicators (i.e. cash-in-hand balance, total deposits, liquidity-gap and NPLs) and profitability (ROAA). Here, liquidity risk indicators are independent variables and profitability (ROAA) indicator dependent variable. Pearson Correlation Matrix shows that, all the independent variables are negatively significant. In addition, Multiple Regressions shows that, cash-in-hand and liquidity-gap are positively related. On the other hand, total deposits and NPLs are negatively related, it is mentioned that NPLs is highly significant.

Finally, Prime Bank Limited will do better if they manage cost-of-deposit or cost-of-fund properly as well as gives importance on economic condition of Bangladesh.

Chapter 1: Introduction

1.1. Background of the Report

The banking industry is reflected as a one of the major financing source of economic development of a country. Now a day's modern economy mostly depends on banking sector because the wheel of a country's development run by banking sector.

Bangladesh follows a diversified banking system; here we see Private Commercial Banks (PCBs), State-owned Commercial Banks (SCBs), Specialized Commercial Banks (SBs) or Development Financial Institutions (DFIs) and Foreign Commercial Banks (FCBs). Bangladesh Bank, which is country's central bank, regulates all the banks and Bangladesh Bank is only in charge of formulating and executing monetary policies and rules-regulations of the banking sector.

In our country, commercial banks work as an intermediary between borrowers and lenders. In addition, banks are actually making profit by manages temporarily available resources from individual clients and corporate organizations and provide loans and other financial services.

However, In Bangladesh Prime Bank Limited is well-known private commercial bank and serves corporate sectors and individuals. From the beginning, Prime Bank Limited is very much focused with the liquidity risk, credit risk and customer service. In the recent year, banking sector of Bangladesh faces liquidity crisis and Prime Bank also one on them. Hence, this study will gives us a complete picture of liquidity risk that Prime Bank Limited experiences.

1.2. Origin of the Report

Internship program is the most significant phase for a Bachelor of Business Administration (BBA) student. Hence, like any other ' Business School' an opportunity is also offered by United International University (UIU School of Business & Economics) for its prospective business graduates to get three months (90 days) practical experience, which transfers a ultimate learning technique to know about the business or corporate culture and cope up the environment in such a way like skilled personnel. I was stated my internship at Prime Bank Limited, Pallabi Branch, Dhaka, from 5th February'2018 to 5th May'2018. At the time of internship, I mostly worked with the Credit Team and I have also worked at General

Banking desks of the branch. This report entitled "Liquidity Risk Analysis and Profitability of Prime Bank Limited".

1.3. Objective of the Report

The broad objective of the report is to know about the current liquidity risk and performance of Prime Bank Limited and to fulfill the requirement of the internship program under BBA program. I tried my best to identify the real scenario of impact of liquidity risk on bank's profitability.

However, I figure out specifically the consequence of liquidity risk and profitability, following are given below -

- To identify indicators of liquidity risk
- To analyze the factors influencing liquidity risk and Probability of Prime Bank Limited.
- To find and mention possibilities of improvement in liquidity risk management of Prime Bank Limited.

1.4. Rationale of the Report

Liquidity risk is treated as one of the most significant risks for any commercial bank or financial institution. The liquidity risk is also influence the profitability of the bank. The findings of this research hopefully will create consciousness among management and employees of the Prime Bank Limited, who are involving with bank's day-to-day activities. The findings also will help bank to improve their financial condition and to make effective decisions.

1.5. Scope of the Report

Banking industry of Bangladesh is in the mature stage. Therefore, this study will help the following areas of banking sector as well as Prime Bank Limited

- Impact of liquidity risk.
- Influence of maturity mismatch.
- The analyses of some indicators related with liquidity risk.

Each of the above-mentioned areas would be critically explored in order to regulate the ability to manage liquidity risk and performance of bank.

1.6. Limitation of Study

However, there was some limitations constraint when the study was conducted.

- It is difficult to gather and recognize the insights of the complete liquidity risk of the bank within a short period (three months).
- It was tough to explain appropriate variable in examining liquidity risk on banking profitability, and it may differ to country-to-country, which depend on local financial system.
- As an intern of Prime Bank limited, Pallabi Branch, I have to work in different divisions of the branch & throughout the period of internship.
- Recent facts and information on various events of Prime Bank Limited was absent.

1.7. Methodology of the Report

1.7.1.   Sources of Data

The initial data and information were collected from different secondary sources like exploiting articles/journals, academic books, and annual reports of the Prime Bank Limited. In addition, unstructured discussions were conducted with bank's employees and academics and it was very helpful to understand the over-all association between liquidity risk and performance of a bank.

1.7.2.   Nature of Data

Data/value was collected from annual reports published in the Annual General Meeting and Securities & Exchange Commission. This study emphasis only on Prime Bank Limited and the data have been collected from Year 2003-2017. From the financial statements of annual report, I have taken total deposits, cash in hand balance, amount of NPLs (non-performing loans) and the liquidity-gap (0 to 1month).

1.7.3.   Research Method

The relationship between liquidity risk and profitability indicators such as, total deposits, cash in hand, liquidity-gap, NPLs and ROAA have been analyzed with the help of IBM SPSS statistical tool. Linear Multiple Regression analysis and Pearson Correlation was applied to the data to detect the effect of the various aspects of liquidity risk on the profitability of the Prime Bank Limited.

1.7.4. Limitations of the Report

In this report, there are certain limitations visible such as, all data collected from annual report and only Return-on-Average Assets (ROAA) are used as the measure of performance (profitability). Economic aspects contributing to liquidity risk are not covered in this report

Chapter 2: Overview of the Organization

2.1 Profile: Prime Bank Limited

In 17th April 1995, number of few skillful, brilliant, established and visionary persons came forward to establish a private commercial bank in Bangladesh. At that time, Prime Bank Limited began their journey.

As a completely authorized commercial bank, Prime Bank Limited is being overseen by a profoundly proficient and devoted group of people with long involvement in financial sector. They continually center on comprehension and envisioning client needs. Day by day private commercial banking system experiences changes; as a result, Prime Bank Limited transposes itself in the transformed economic environment.

Prime Bank Limited has effectively earned enormous ground inside a brief time of its reality and the bank has been reviewed as a "Best Class Bank" in the country through universally approved CAMELS rating. Prime Bank Limited has officially possessed a well-heeled place among its rivals.

Prime Bank Limited has established excellent perceptions into the needs of every sector whether retail, MSMEs or corporate and has steadily prove the ability to offer innovative solutions for all. Its network of 146 branches and 3 Offshore Banking Units in Bangladesh and history of over 23 years, In addition, Prime Bank Limited has made on its capability in a extensive area of financial services and presently its variety of facilities includes corporate or institutional banking, commercial banking, investment banking, merchant banking, Islamic banking, offshore banking, securities trading, lease financing and internet or web-based banking. Prime Bank has achieved numerous international rewards for superiority and modernization.

Few Awards mentioned below:

- In 2015-
  - SAARC Anniversary Awards for Corporate Governance Disclosures and SAFA Best Presented Annual Report Awards and
  - 'ICSB National Award' for 'Corporate Governance Excellence 2015'- Gold Award
- In 2013,

o 'Best Bank of Bangladesh' by Global Survey (Best Emerging Market Bank in Asia)

- In 2011,
  - o 'International Star for Leader in Quality (ISLQ)' Award, France.

Last Six Years Key Financial Indicators:

BDT in Million

Particulars	2017	2016	2015	2014	2013	2012
Deposits	199,014	197,934	194,825	204,838	201,907	182,053
Advances	198,323	170,211	151,865	147,367	153,589	160,890
Assets	281,275	256,599	252,161	254,912	243,869	236,833
CRAR	14.01%	12.45%	12.74%	12.21%	12.04%	12.73%
Operating Profit	5,373	5,757	5,906	6,157	7,474	8,551
Cost income Ratio (CIR)	55.98%	52.11%	51.08%	48.29%	41.98%	36.62%
Cost of Fund	7.91%	8.09%	9.72%	10.19%	11.62%	11.64%
Cost of Deposits	4.46	4.94	6.64	7.36	8.80	8.75
Gross profit ratio	55.28%	52.97%	45.85%	43.33%	42.15%	43.66%
CD ratio	99.65%	85.99%	77.95%	71.94%	76.07%	88.38%
Return on Assets (ROA)	0.38%	0.86%	0.84%	0.96%	0.76%	1.24%
Return on Equity	4.24%	8.49%	8.41%	10.08%	8.35%	13.53%
Earnings per share (EPS)	1.03	2.13	2.08	2.32	1.78	2.62

Table 1: Last Six Years Key Financial Indicators

Vision

"To be the best Private Commercial Bank in Bangladesh in terms of efficiency, capital adequacy, asset quality, sound management and profitability having strong liquidity."

Mission

"To build Prime Bank Limited into an efficient, market-driven, customer focused institution with good corporate governance structure. " (Prime Bank Limited, 2018)

"Continuous improvement of its business policies, procedure and efficiency through integration of technology at all levels." (Prime Bank Limited, 2018)

2.2 Management of Prime Bank Limited:

Boards of directors are the only authority, who can take resolution on the affairs of the bank. Currently, there are Thirteen (13) directors and 3 independent directors in the management of the bank. There are 3 (three) different committees in the bank for the efficient management of the bank.

- Board of Directors
- Policy Committee
- Executive Committee

2.3 Departments of Prime Bank:

The bank sorts out every one of the employments considering their inter-personal relationship and employees are assigned in a specific office to manage the framework viably. Divisions are organized for the specific works and the execution of a specific division is estimated consummately.

Prime Bank Limited has following divisions:

- Human Resources Division	- Recovery & Legal
- Finance Division	- Trade Service and Correspondent Banking
- Audit and Inspection Division	- Logistic and Support
- Internal Control and Compliance	- Information Technology
- Marketing Division	- Retail Finance Center
- Corporate Banking	- Credit Division
- Consumer Banking	- MSME
- Treasury	- Credit Admin & Monitoring
- Card Division	- Corporate Affairs

Table 2: Prime Bank Limited Divisions

CORPORATE ORGANOGRAM

LIQUIDITY RISK ANALYSIS AND PROFITABILITY
OF PRIME BANK LIMITED
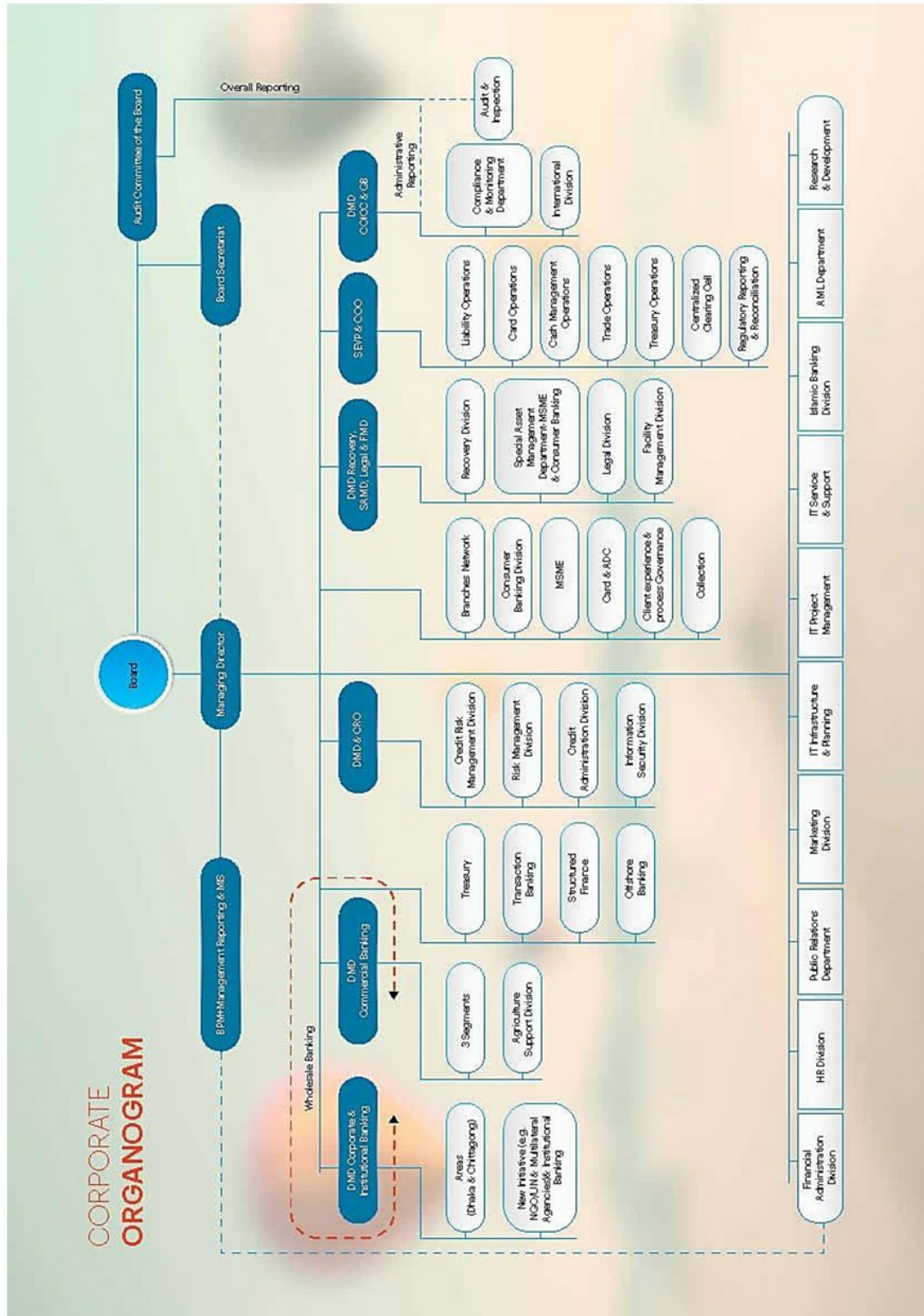
2.4 Product & Services provided by Prime Bank Limited

RETAIL BANKING	WHOLESALE BANKING	ISLAMIC BANKING	MSME BANKING	NRB BANKING
• Deposits • Loans • Cards • Internet Banking • SMS Banking • Locker Services	• Corporate & Institutional Banking (CnIB) • Commercial Banking	• Deposits • Investments • Foreign Trade • Weightage and Distribution of profit under Islamic Banking	• Loan Products • Deposit Products • Trade Services • Enterprise Development Services	• Foreign Remittance Services • Account Facilities • Prime NFCD Account • Bank's Overseas Network • Exchange Houses • Remittance and Fund Transfer • Correspondent Bank Accounts for Wire Transfer • opening and operating FC accounts • USD Premium Bond • USD Investment Bond • Wage Earners Development Bond

Table 3: Product & Services provided by Prime Bank Limited

2.5 Pallabi Branch, Prime Bank Limited:

The overall banking operation of Pallabi Branch can be separated into three divisions. These divisions are:

1. General Banking

2. Foreign Exchange Division

3. Credit Division

- Retail
- MSME

Account opening, Local Remittance, Clearing, Deposit and Accounts are the subdivisions that belong to the General Banking Division, where as Import, Export and Foreign Remittance are the subdivision under Foreign Exchange Division.

At present about 17 personnel worked at Pallabi Branch of Prime Bank Limited.

Chapter 3: Theoretical Aspect

3.1 Literature Review

Commercial Banks experience liquidity risk, when they are unable to liquidate their assets on a rational value. As a result, depletion occurs and a remarkable decline in profitability. Commercial banks experience liquidity trap, which may arise huge amount of deposits withdrawal (Jeanne, O & Svensson, L.O, 2007) . However, situation like this cannot be constantly the prime cause of liquidity risk (Rajan, R.G. & Diamond, D.W, 2005). Sometimes many kinds of different reasons occur which may create enormous liquidity crisis for the banks, such as, extensive assurance based, and long-term loan could generate severe liquidity problems (Stein, J.C., Kashyap, A.K., & Rajan, R., 2002). In addition, theory suggests that, two essential aspects of liquidity risk: (1) maturity (maturity of a commercial bank's assets & liabilities) and (2) the in-built liquidity of a bank's asset (an asset can be transacted without experiencing a substantial loss of value in any situation). According to Goodhart (2008), about the maturity alteration banks can be relaxed, if they have the available assets which can be transacted without carriage any cost.

On the other hand, liquidity risk occurs, when economics environment at declining stage, affecting less resource initiation and growths the demand of depositors which may create liquidity risk. As a result, the unsuccessful bank or the whole banking sector experiences bad outcome (Diamond, D.W. and Rajan, R.G., 2005). Liquidity risk possibly will arise because of the interruption in cash flows from the debtors or premature dissolution of the schemes (Diamond, D.W. and Rajan, R.G., 2005). Besides, an extreme liquidity crisis may source of huge drowning in form of liquidations (Goodhart, 2008) and leading to an extreme financial disaster (Feldman, R, Mishkin, F.S., & Stern, G., 2006).

However, Liquidity risk is a crucial factor of the overall risk management structure of the all-financial bodies (Abdul Majid, 2003). Preferably, an organized financial institution or a bank must have a distinct tool for the measurement, identification, mitigation and monitoring of liquidity hazard (Comptroller of the Currency, 2001). A bank can be identified the sources of liquidity hazard to evade losses if follows modern banking system.

Most of time banks try to hold minimum cash balance to avoid liquidity problems (Jenkinson, 2008).On the other hand, banks depends on the deposits because it work as natural hedge to resolve banks' liquidity problem (Strahan, P.E. & Gatev, E., 2003).

Liquidity crisis may create problem for a bank's profitability and capital, therefore in utmost situations a solvent bank may subside (Central Bank of Barbados, 2008). In the time of liquidity-crisis, banks may have to borrow from the market at extremely high rate. As a result, it affects banks' earning. In addition, most of the bank focus on borrowing to serve their clients' request and the bank try to maintain their capital structure in an ideal place because of debt-equity ratio's up-ward tendency.

The researcher Falconer, (2001) state that, from marketing viewpoint a bank should be conscious about its liquidity part because, this may help to increase its clients' loans if creates attractive market prospects. When a bank experiences liquidity crisis then it may loses a number of business prospects.

According to daily newspaper The Financial Express, during the year'2017 financial market faced liquidity crisis and the private sector of Bangladesh experiences many problems because most of the commercial banks did not have sufficient fund(lending issue) , as result, banks losses number of business opportunities. Reason behind this, liquidity crisis was arise because most of the government project depends on mostly bank financing.

A country's economic development mostly run by banking industry and research is so important to enhance its working outcomes. The management without any correct strategy is like "constructing a structure on sand". It implies a powerful administration dependably needs a careful and ceaseless pursuit into the idea of the explanations behind, and the outcomes of association. However, some previous research conducted by individuals and institutions are go through to have an in-depth insights into the problem and exploring the relationship between bank's liquidity risk and profitability(ROAA).

A bank can be identified liquidity hazard as a danger, when bank unable to exchange fund at a sensible cost (Muranaga, J. & Ohsawa, M., 2002) . From this sense, there are two significant meaning of liquidity hazard quoted i.e. (1) when needed liquidating the assets at a fair market value and (2) most of the time banks face liquidity hazard if banks incapable to liquidate their assets at a rational value. Liquidity management plays a vital role and fundamental part of the management. Furthermost private commercial banking industry depends on the flexibility of a bank to supply liquidity to their clients.

Most of financial transactions or promises have the implications for liquidity. Commercial banks can apply yearly balance sheet liquidity analysis, cash balance position and maturity mismatch method to measure liquidity risk (Matz, L., and Neu, P. , 2007).

Banks profitability depends on bank management interest, financial markets, bank administrators and academics (Jacob A. Bikker and Jaap W.B. Bos, 2008). Hester, DD & Zoellner, JF, 1966 found that , most of the asset items are related to a significant positive association and most of the liability items such as time , demand, and savings deposits were found negatively associated to profits. According to (Wanzenried, G. & Dietrich, A., 2011), to identified the determinants of banks' profitability, both researcher apply a linear dynamic model with dependent variables return on average assets (ROAA) as proxy for profitability.

3.2 Conceptual Framework:

Banking business depends on the deposits and almost every banking operation is run through the deposits. However, a term 'liquidity trap' occurs - when clients start withdrawing their fund from bank (Jeanne, O & Svensson, L.O, 2007). Researchers 'Rajan, R.G. & Diamond, D.W.(2001)' also said, when 'liquidity trap' occurs, bank's fall-into the fund crisis and to over-come this situation they try to borrow funds from the other-bank or central bank which is much costly. On the other hand, bank having sufficient deposits normaly will not facing any crisis and to increase bank's profitability.

Therefore, following hypotheses rise:

- **Hypotheses – 1: Total deposits increases; the profitability of the bank also increases.**

Most of the bank focuses to preserve sufficient reserves, because that will meet the unexpected demands from depositors. (Abdul Majid, 2003), nevertheless, keeping the cash-balance is enormously expensive (Tirole, J. & Holmstrom, B., 2000). However, the banks keeping huge cash-in-hand reserve, reason is that, they could not miss any opportunities in the market but to maintain huge idle fund (cash) is much costly.

This situation is hypothesized as follows:

- **Hypotheses – 2: Increase in cash-in-hand balance, reduces the profitability of the bank.**

Basically, liquidity risk arises when maturity between assets and liabilities mismatched. However, in the financial market, most of the time the assets are backed by clients' funds and at any time depositors (fund suppliers) want their money back. This condition is happened, due to the mismatch among the assets and the liabilities (Yogo, M. & Brunnermeier, M.K., 2009)

According to Falconer.B.(2001) and Plochan.P.(2007), a bank measured mismatch with help of liquidity statement where shows, maturity gap between assets and liabilities and this mismatch also known as liquidity gap. Liquidity risk arises when liquidity gap is high (Plochan.P., 2007) (Goodhart, 2008)

This situation is hypothesized as follows:

Hypotheses – 3: Increase in the liquidity-gap, decrease in the bank's profitability.

Almost every banks emphasis on the corporate clients or else large volume lending, that actually arises a challenge for the financial institution/bank administration to preserve mandatory liquidity allocation (Akhtar, 2007). Most of the time bank faces liquidity crisis because investment of long-term large-volume loan (Stein, J.C, Kashyap, A.K., & Rajan, R. , 2002). In addition, when a country's economic condition poor then the loan retirement procedures slow down and as a result, non-performing loans (NPLs) increases. Rapid growth of NPLs creates liquidity crisis, which is unavoidable. Therefore:

Hypotheses – 4: High provisioning for NPLs, reduce in the bank's Profitability.

Chapter 4: Analysis & Discussions

This part of the chapter shows the analysis of the results and discussions based on the research objectives. The results are presented in the 3 forms i.e. descriptive statistics, correlation matrix and multiple regression analysis.

4.1 Descriptive Statistics

Table - 4 represents, the analysis of liquidity risk variables of Prime Bank Limited for the year 2003-2017 by summarizes the descriptive statistics of the variables.

Descriptive Statistics

	Mean	Std. Deviation	Observation
ROAA	1.4967	.63565	15
CASH	10369.7421	7063.13773	15
DEPOSITS	124649.8667	70844.14611	15
LIQUIDITY_GAP	2897.0518	4626.70661	15
NPLs	4393.2413	4672.53773	15

Table 4: Descriptive Statistics

Notes: Deposits = Total Deposits; Cash = Cash-in-Hand Balance; Liquidity gap = One Month Assets-Liability Gap; NPLs – Non-Performing loans; ROAA = Return-on Average Asset (Profitability Ratio)

The mean of the ROAA is positive which is significant and indicating that, the whole banking system of Prime Bank Limited is appreciating a well profitability, then mean of Cash, Deposits, Liquidity-Gap and NPLs. However, this actually indicates that, as much as the Prime Bank enjoys well-profit consequences, at the same time PBL is experiencing huge amount of cash-in-hand balance, high volume of deposits, high liquidity mismatch and also high level of NPLs. The high standard deviation indicates that the cash, deposits, liquidity-gap and each year NPLs varies significantly from last year and, reason might be age of the bank and capability of the branch.

4.2 Pearson Correlation Matrix & Multiple Regressions

Pearson Correlation Matrix

	ROAA	Sig. (2-tailed)
ROAA	1	.000
CASH	-.677**	.006
DEPOSITS	-.693**	.004
LIQUIDITY_GAP	-.555*	.032
NPLs	-.865**	.000
**. Correlation is significant at the 0.01 level (2-tailed).		
*. Correlation is significant at the 0.05 level (2-tailed).		

Table 5: Pearson Correlation Matrix

Above table (Table – 4) shows, the Pearson correlation coefficient created from the data. The correlation matrix shows that profitability (ROAA) is negatively correlated with all independent variables i.e. NPLs, deposits, cash and liquidity-gap. Here, all the independent variables in the correlation matrix show less than 0.90, which indicates the existence of multicolinearity. In addition, multicollinearity is the condition while selected the explanatory variables, which are extremely related and influencing the dependent variables as a result it is quite challenging to express correct outcome. However, the intensity of multicollinearity would be established in a situation, when regression coefficients are not significant (p-values) but F-statistic is significant.

Multiple Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.880	.775	.684	.35704
a. Predictors: (Constant), NPLs, LIQUIDITY_GAP, CASH, DEPOSITS				

Table 6: Model Summary

Above table (Table – 6) represents the outcomes of linear multiple regressions. Here, the value of R^2 is 0.775, which expressing 77.5% variability in ROAA (profitability) could be described by the developed model. Moreover, the adjusted R^2 is a developed based on R^2 in the population. In addition, the value of adjusted R^2 is 0.684 and the value of the adjusted R^2 provides a revised estimate, i.e. 68.4% of the variability in profitability (ROAA) of bank will be visible for this fitted model. Lastly, the R^2 is 77.5%, which is considered as moderate level to fit the model.

ANOVA[a]					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.382	4	1.095	8.593	.003
Residual	1.275	10	.127		
Total	5.657	14			
a. Dependent Variable: ROA_AVERAGE					
b. Predictors: (Constant), NPLs, LIQUIDITY_GAP, CASH, DEPOSITS					

Table 7: ANOVA Table

Table - 7 actually shows, *F*-test result which means that F=8.593 will be significant at .003. If R^2 is zero (there is no effect) then the null hypothesis is rejected. Therefore, minimum one of the dependent variable of the liquidity risk associated with ROAA (profitability) of the Prime Bank Limited. The model fitness is authenticated when $p < 0.05$, and this means there is extremely well relationship between variables of liquidity risk and the ROAA (profitability) of Prime Bank Limited.

Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	196.113	35.788		5.480	.000
CASH	.006	.013	.648	.438	.671
DEPOSITS	-0.000325	.001	-.362	-.237	.818
LIQUIDITY_GAP	.001	.003	.054	.265	.797
NPLs	-.016	.005	-1.147	-3.331	.008
a. Dependent Variable: ROA_AVERAGE					

Table 8: Coefficients Table

However, coefficient table (Table – 8) represents that, not a single variable of liquidity risk is not associated with the profitability (ROAA) of the Prime Bank Limited.

From the regression coefficients table -

▪ Here, Deposits (B= -0.000325) and liquidity risk was found to have an insignificant (p=.818) and negative relationship for Prime Bank Limited. There would be .0325% negative change in the ROAA. This means if deposits increases, at the same time ROAA (profitability) decreases. According to the Aldoseri (2012) and Indriani (2008), it indicates that bank with huge deposits will have a lower liquidity and it arises liquidity risk exposure. This suggests that, unutilized high deposits in the banking system will be able to increase liquidity risk. The findings is contradictory with the study from Rajan, R.G. & Diamond, D.W.(2001) ; Jeanne, O. and Svensson, L.O.(2007) , if banks hold more deposits that will also increase ROAA(profitability).

Hypotheses – 1: Total deposits increases, the profitability of the bank also increases. (Rejected)

- Cash (B= .006) is not significant (p=.671) only just so and coefficient is positive which would indicate that huge amount of cash-in-hand balance provides higher ROAA (profitability). If the ROAA of the banks is raised by .6% it means cash-in-hand also increased. The t-value of this coefficient is .438, i.e. moderately significant. According to 'Tirole, J and Holmstrom, B.(2008)' , the hypothesis is accepted, because here as result shows a positive relationship with ROAA. These results are supported by

Hypotheses – 2: Increase in cash-in-hand balance, reduces the profitability (ROAA) of the bank. (Accepted)

- The beta coefficient of liquidity gap is .001. It indicates that there will be a .1% positive variation in the ROAA (profitability) of the Prime Bank because of change in the liquidity gap. However, p-values is 0.797, which is not significant. In addition, according to Plochan.P.(2007) and Goodhart, (2008), profitability is negatively associated when the liquidity gap. Thus,

Hypotheses – 3: Increase in the liquidity-gap, decrease in the bank's profitability (ROAA). (Rejected).

- The beta coefficient of non-performing loans (NPLs) shows - .016 which means, a 1.6% negative deviation in ROAA (profitability). The p-value is 0.008,which is highly significant. If the NPLs of the bank increase consequence is profitability also decrease (Kashyap, A.K., Rajan, R. & Stein, J.C., 2002). Therefore , hypotheses is accepted.

Hypotheses – 4: High provisioning for NPLs, reduce in the bank's Profitability. (Accepted)

Chapter: Five

5.1 Conclusion:

This report investigates the relationship between Prime Bank's liquidity risk and profitability (ROAA). Many relevant journal, academic papers state that, liquidity crisis/problem is extremely serious issue for a commercial bank because, it will negatively influence commercial bank's balance sheet i.e. profitability, capital, credit management and so on. In addition, if bank management totally unable to control or overcome the bank's liquidity issue, then a solvent or pioneer financial institution might be collapse within few years.

According to this study, there were four hypotheses and the study found that, two of the hypotheses accepted (Hypotheses 2&4) and the other two rejected (hypotheses 1&3). From the accepted hypotheses: 2, Prime Bank is currently hold adequate cash-in-hand balance and practically this may help them to manage or avoid liquidity risk but Prime Bank Limited may be experience opposite situation. However, hypotheses: 4 also accepted with high significant level, here profitability (ROAA) of Prime Bank Limited is negatively influenced by NPLs. The reason might be the high provisioning of NPLs. In addition, high provisioning of NPLs occurs when bank unable to observe their long-term financing and sometimes this can be impact on credit management and continuous provisioning create liquidity crisis.

The study also shows that profitability (ROAA) did not follow the practical way, which means when total deposits increases, the profitability (ROAA) reduces. However, in a practical way it should be align with the same direction. On the other hand, liquidity-gap shows different result i.e. when liquidity-gap increases, profitability (ROAA) also increases due to liquidity surplus.

Therefore, this research shows some liquidity risk indicators which may affects Prime Bank's performance and stability.

5.2 Recommendations

This study mentioned that selected indicators were not perfectly align with the performance of the bank, one of the reason could be cost-of-deposit or cost-of-fund not managed properly. However, if Prime Bank's authority focuses on their liquidity management portion then bank will avoid liquidity risk exposure and perform better in the competitive market. An advanced level study is recommended to explore more reasons of liquidity risk and eliminate that threat.

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APPENDIX

FINAL GRADE

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GENERAL COMMENTS

Instructor