

Liquidity Risk of Licensed Commercial Banks in Sri Lanka



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ABSTRACT

Objective: This study is intended to investigate the impact of Liquidity Risk of licensed Commercial Banks in Sri Lanka.

Methodology: In this study, four key variables such as Loan to deposits Ratio, Statutory Liquid Asset Ratio, Non-Performing Loans and Liquidity Gap have been taken as the independent variables. Return on assets, Return on equity and Net Interest Margin have been taken as the dependent variable for a period of ten years from 2011 to 2020 as convenience samples. To analyze the data Pearson's correlation analysis and multiple regression analysis were used.

Findings: There was a positive relationship between Loan to Deposit and ROA. ROE and NIM and SLAR had positive relationship with ROA and negative relationship with ROE and NIM. As well as NPL and LG showed negative relationship with ROA and ROE and positive relationship with NIM. This study is useful in understanding the factors of liquidity risk and their impact on the financial performance of the banks and based on these findings can be maintained proper liquidity position.

KEY WORDS: Liquidity Risk, Non-Performing Loan, Liquidity Gap, Statutory Liquid Asset, Liquidity Gap, Financial Performance.

BACKGROUND OF THE STUDY

In this study, researcher tries to identify the impact of the liquidity risk on financial performance of the licensed commercial banks in Sri Lanka.

Banks that are distinguished from other financial institutions, play intermediary role in the economy by providing diversity of financial products and services to facilitate the saving and capital formation in the economy. In performing these activities, banks' liquidity position and liquidity risk plays a significant role. This liquidity risk threatens banks stability and leads to banks fragilities and failures. The liquidity risk can affect not only banks performance but also banks reputation. The insufficient liquidity causes erosion in depositor's confidence which leads to an opportunity cost (Workineh, 2016). The liquidity is the ability of a bank to meet its obligations as they come due without incurring unexpectable losses. The liquidity is the capability to secure the necessary funding thorough attracting deposits, cash or pledging assets. (Soprano, 2015). Therefore, managing liquidity is the most important activities of the banks. Sound liquidity management can reduce the probability of serious problems of bankruptcy. Thus, the liquidity management of the banks must measure and monitor its liquidity position frequently to meet liability demand so that it can avoid bankruptcy and maximize its profit. The liquidity management is to ensure that every bank is able to meet fully its contractual commitments. The liquidity management means planning, controlling and maintaining of enough fund to ensure the enough liquid assets either as an obligation to the customers to meet some obligations incidental to survival of the business or as a measure to adhere to the monetary policies of the central bank. Commercial banks are expected to maintain certain levels of reserves for this purpose. These reserves are statutory requirements stipulated by the central bank specifying the cash reserves equal to certain fraction of the banks' deposits or loans and advances which bank must maintain. For this reason, the analysis of liquidity requires the management of the bank not only to measure the liquidity position of the bank on an ongoing basis, but also to examine how funding requirements are likely to evolve under various scenarios, including adverse conditions (Workineh, 2016). Practically, liquidity management in commercial banks is surrounding both size of the prospective needs for liquidity at any given time and the availability of sources of sufficient liquidity to meet them. The liquidity of the commercial banks can be measured as Loan to Deposit, Statutory Liquid Asset, Non-Performing Loan, Liquidity gap, Cash & cash equivalent Deposit Ratio, Operating cost efficiency, Bank size (Total Assets), Current ratio, Quick Ratio, Customer Deposit and etc. In this research, the researcher used Loan to Deposit, Statutory Liquid Asset, Non-Performing Loan and Liquidity gap as a measurement of liquidity in licensed Commercial Banks in Sri Lanka.

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The commercial banks in Sri Lanka mostly engage in traditional banking activities. They do not engage in any fund generation through the wholesale fund market. When they engage banking activities, they face many risks due to their nature of banking businesses as credit risk, liquidity risk, market risk and operational risk. The liquidity risk is very important to minimize in order to maximize the profitability of the banks. Liquidity problems may adversely affect a given bank's earnings and capital. Under extreme circumstances, it may cause the collapse of an otherwise solvent bank. A bank having liquidity problems may experience difficulties in meeting the demands of depositors. However, this liquidity risk may be mitigated by maintaining sufficient cash reserves, raising deposit base, decreasing the liquidity gap and non-performing loans.

In 2020 Sri Lanka's economy continues to be impacted by the COVID-19 pandemic with the several key sectors of the economy including severe effect of banking sector liquidity in Sri Lanka. This scenario was motivated the researcher to study this problem in Sri Lankan context and try to give some guide about the liquidity risk and its impact to the banks when doing this study.

Therefore, this research examines the factors of liquidity risk and evaluates the impact of liquidity risk on the performance (ROA and ROE) and top line (NIM) of the licensed commercial banks in Sri Lanka from 2011 to 2020. Ultimately, the findings of this study provide the necessary direction to mitigate liquidity risk factors in order to execute a right strategy and improve the performances of banks.

LITERATURE REVIEW

The literature review covers the management of liquidity risks on financial performance of commercial banks in Sri Lanka. After the subject matter being covered the empirical studies are discussed for the final conclusion of the studies.

Commercial Loan (Traditional) Theory and Liquidity

The commercial loan theory of credit became obsolete one but, short-term commercial loans are desirable because they can be repaid with income resulting from the commercial transaction financed by the loan.

Shiftability Theory

This theory posits that a bank's liquidity is maintained if it holds assets that could be shifted or sold to other lenders or investors for cash.

Anticipated Income Theory

This theory holds that a bank's liquidity can be managed through the proper phasing and structuring of the loan commitments made by a bank to the customers. Here the liquidity can be planned if the scheduled loan payments by a customer are based on the future of the borrower.

Liquidity Risk

The inability of banks to raise liquidity can be attributed to a funding liquidity risk that is caused either by the maturity mismatch between inflows and outflows and the sudden and unexpected liquidity needs arising from contingency conditions. (S.Claassen & Rooyen, Bank Liquidity Risk Management: A South African Survey to determine future change, 2012)

Managing Liquidity Risk

Liquidity risk is the inability to meet contingent financial obligation without incurring unacceptable losses. Banks in general are vulnerable to liquidity and solvency problems resulting from asset and liability mismatches. Therefore, liquidity risk management is an essential component of the overall risk management framework of the financial services industry.

Empirical Review

Madhuwanthi, R.M.R & Morawakage, P.S. (2019) investigated secondary panel data from 2006 to 2016 to identify the significant liquidity risk factors and the impact of them on both top line and bottom line performance indicators of commercial banks. It was found that liquidity gap and non-performing loan ratio were the significant proxies for liquidity risk. Multiple regression analysis revealed that liquidity risk negatively and significantly affected bottom lines Return on Average Assets (ROAA) and Return on Average Equity (ROAE), while positively affected the top line Net Interest Margin (NIM) of the commercial banks. The findings of this study suggested that expenses of the banks should be controlled with better liquidity management to enhance bottom line performances.

(Wijewardana & P.D.Wimalasiri, 2017) Examined how risk affects to the performance of commercial banks in Sri Lanka. For this purpose the study selected credit risk, liquidity risk, operational risk and capital management risk as independent variables while return on assets and return on equity are utilized as dependent variables.

(N.Jeevarajasingam, 2014) Conducted a study aims to examine the impact of liquidity on profitability of banking sector in Sri Lanka from 2008 to 2012. To conduct this research, samples were selected from all commercial banks in Sri Lanka. These data were

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presented and analyzed by using correlation and regression tools. According to the analyses, showed that liquidity ratio has strong positive correlation with return on assets (ROA). Otherwise, there is no relationship between liquidity and banks' profitability (Net Profit Ratio). There was no significant impact of liquidity on profitability of banking sector in Sri Lanka.

(Suganya & L. Kengatharan, 2018) Investigated to what extent bank specific factors impact on financial performance of domestic licensed commercial banks in Sri Lanka. Explanatory variables of this study were capital adequacy ratio, operating cost efficiency, non-performing loans, bank size and liquidity. Return on assets and return on equity were treated as criterion variables to measure financial performance. The researchers collected data from published financial statements of nine domestic licensed commercial banks listed on Colombo Stock Exchange for the period of ten years from 2006 to 2015. Descriptive and inferential statistics had been used to examine the impact of bank specific factors on financial performance using STATA package. The Result of the study showed that capital adequacy ratio had positive significant impact on ROA while operating cost efficiency and non-performing loans had negative significant impact on ROA. Non-performing loans had significant negative impact on ROE while bank size had positive significant impact on ROE.

A study undertaken by (MACN. Shafana, 2015) Examined the degree and pattern of determinants of liquidity on profitability of financial institutions in Sri Lanka for the period from 2009 to 2013. The study covered 16 Banks and Finance Companies listed on the Colombo Stock Exchange. For these objectives, the study used Cash Position Indicator (CPI), Capacity Ratio (CR) and Total Deposit Ratio (TDR) as independent variables to measure the liquidity level to examine its determinants on Return on Assets (ROA) of financial institutions in Sri Lanka. The correlation and regression model were used as statistical tools for hypotheses testing to draw final conclusions. The findings revealed that CPI and TDR had significant determinants on ROA with sign of positive and negative respectively while CR had insignificance on ROA of Banks and Finance Companies in Sri Lanka.

(M.Jathurika, 2019) Preferred to extend earlier research on the impact of Non-performing Loans on financial performance. The study confined only nine listed commercial banks in Sri Lanka through the purposive sampling due to the minimize of missing data and links secondary data derived from the annual financial reports of commercial banks using the CSE's database. Regression and Correlation analysis had been employed for the study to investigate the effects of non-performing loans on financial performance.

(Endri, Marlina, & Hurriyaturrohman, 2020) Investigated the impact of bank-specific factors and macroeconomic indicators on the net interest margin (NIM) of commercial banks in Indonesia. Data from Indonesian commercial banks were used. Data were collected from the banks' annual reports and the Financial Services Authority (OJK) for the period 2008 to 2018. A panel data regression model was used to estimate the effect of bank-specific and macroeconomic factors. The results proved that the variables of Non-Performing Loans (NPL), Loan to Deposit Ratio (LDR), and Return on Assets (ROA), Interest Rate (SBI), and Exchange Rate (FOREX) were affected NIM. The exchange rate variable had a predominant effect, while the NPL factor had a less strong influence on NIM.

(Ben Moussa & Boubaker, 2020) Determined the impact of liquidity on bank profitability in the Tunisian context. They used a sample of 18 banks over the period (2000-2017). They employed 2 models of panel static in the empirical research such as descriptive statistics and econometric test. The researchers found that (liquid assets / total assets) and (total credits / total deposits) had a positive and significant impact on return on assets (ROA) whereas (current assets / current liabilities) had not significant impact on ROA. Also, the researchers found that (liquid assets / total assets), and (total credits / total deposits) had a negative and significant impact on ROE (return on equity). Whereas (current assets / current liabilities) had not significant impact on ROE.

RESEARCH METHODOLOGY

Research Problem Statement

The banking system are performing valuable function. While performing their function, they face liquidity risk. The liquidity risk is not only dangerous to the banks and but also its reputation. This risk can adversely affect both bank's earnings and the capital. The bank managers did not pay the necessary attention to this liquidity risk faced by the Sri Lankan commercial banks in the modern era. The top management of the banks pay priority to ensure the availability of sufficient funds to meet future demands of providers and borrowers of funds, at reasonable costs as liquidity versus profitability is a common topic in the finance literature. However, past research evidences show contradictory findings, as some researchers find negative and some researchers find positive relationships, while others find mixed relationship between the liquidity risk and financial performance of commercial banks. Therefore, this study is very important to identify the effects of the liquidity risk on different types of performance indicators of the banks when taking decisions in order to minimize the risk and maximize the profitability of the commercial banks in Sri Lanka.

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Research Questions

This study carried out to identify liquidity risk and its impact on financial performance of licensed commercial banks. The problem statement has identified gap to seek to find answer to the research question to **what extent the liquidity risk influence on financial performance of commercial banks in Sri Lanka?"**

Objectives of the Study

Based on the research questions, following objectives are identified in this study. The objective of the study is to investigate the impact of liquidity risk on financial performance of licensed commercial banks in Sri Lanka.

Conceptualization of Variables

Based on the literature review, this study concentrated on conceptual framework of liquidity risk on financial performance of LCBs. This framework emphasized that how well researcher address to the research question. As well, it shows the relationship between dependent variables and independent variables.

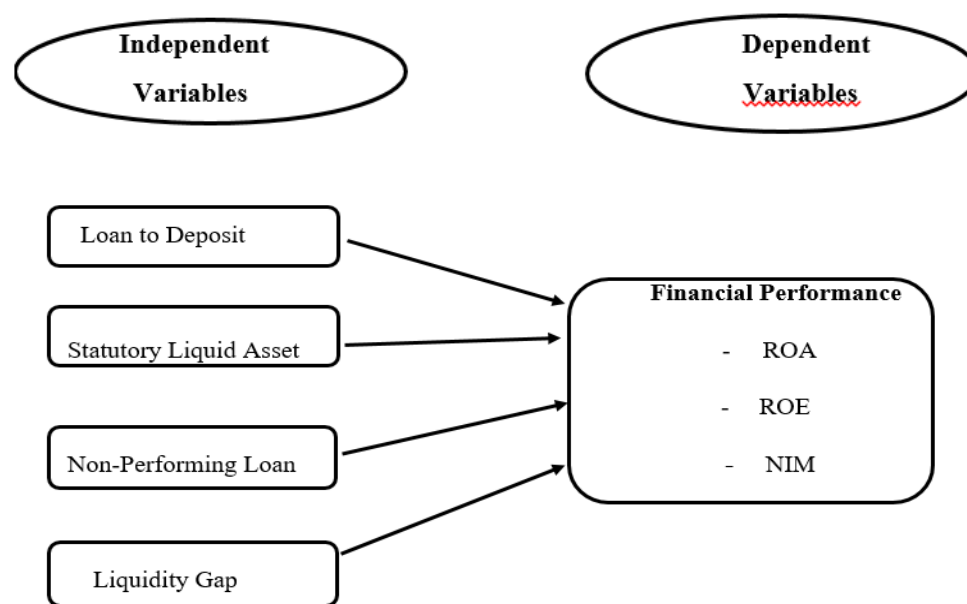


Figure Conceptual Framework
(Source: Developed for this Stud

Hypothesis

- H₀₁**:- There is no significant relationship between loan to deposits and financial performance
- H_{a1}**:- There is a significant relationship between loan to deposits and financial performance
- H₀₂**:- There is no significant relationship between Statutory Liquid Asset ratio and financial performance
- H_{a2}**:- There is a significant relationship between Statutory Liquid Asset ratio and financial performance
- H₀₃**:- There is no significant relationship between Non-Performing Loan and financial performance
- H_{a3}**:- There is a significant relationship between Non-Performing Loan and financial performance
- H₀₄**:- There is no significant relationship between Liquidity Gap and financial performance
- H_{a4}**:- There is a significant relationship between Liquidity Gap and financial performance

Population of the Study

The population this study was all the licensed commercial banks in Sri Lanka that have operated during the period of 2011 to 2020. Currently, there are 24 LCBs listed in Central bank of Sri Lanka. Based on ownership, they are divided into three major categories, such as two State banks, twelve Local banks and ten local branches of foreign banks.

Sample of the Study

This study used non-probability, convenience-sampling technique. Therefore, **twelve commercial banks** are taken as the sample, while others were excluded due to unavailability of data in selected sample year. The twelve banks consist of two state banks and Ten Local banks from out of twenty-four commercial banks through convenience sampling technique.

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Methods of Data Collection

The main source of information gathered in this study is secondary data collection over the sample period of 2011 to 2020. It was sourced from websites of the selected banks, website of the Colombo Stock Exchange (www.cse.lk) and website of the Central bank of Sri Lanka (www.cbcsb.lk).

Statistical tools

The data analysis shows the statistical results regarding liquidity risk and the financial performance.

Descriptive Analysis

Descriptive analysis is the discipline of quantitatively describing the main features of a collection of information. Descriptive analysis usually involved measure of central tendency (mean, medium, and mode) and measures of dispersion (variance, standard deviation, etc.).

Inferential Analysis

Inferential analysis involved to measure multiple linear regressions, correlation coefficient, ANOVA, collinearity statistics are used to test the hypotheses. The Statistical Package for Social Sciences (SPSS) used to analyze the data in this study.

Correlation is a statistical technique which measures an association or relationship between two or more variables. This coefficient (usually represented by the letter “r”) can take on any value between -1 and +1. Multiple regression analysis was applied to the data to examine the effect of the various aspects of liquidity risk on the financial performance of the commercial banks in Sri Lanka. The study used the equations below to achieve the objective of this study:

$$ROA = \beta_0 + \beta_1LDR + \beta_2SLAR + \beta_3NPL + \beta_4LG + \epsilon_1 \quad \text{Equation 1}$$

$$ROE = \beta_0 + \beta_5LDR + \beta_6SLAR + \beta_7NPL + \beta_8LG + \epsilon_2 \quad \text{Equation 2}$$

$$NIM = \beta_0 + \beta_9LDR + \beta_{10}SLAR + \beta_{11}NPL + \beta_{12}LG + \epsilon_3 \quad \text{Equation 3}$$

Data analysis and presentation

Table 1 summarized the descriptive statistics of the variables included in the regression models as presented.

Table 1. Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
		Statistic	Statistic	Statistic	Statistic
LDR (%)	120	44.00	137.00	91.3045	11.02979
SLAR (%)	120	20.19	51.10	26.2514	5.57945
NPL (%)	120	.90	12.44	3.8699	1.80366
LG(RS 000)	120	-1053614257	148053629	-127551568.24	198283976.37
ROA (%)	120	-2.96	5.31	1.6670	1.05436
ROE (%)	120	-7.80	44.69	14.7890	9.15269
NIM (%)	120	1.16	5.90	3.8520	.72507
Valid N (listwise)	120				

(Source: Calculations Based on Annual Reports of Commercial Banks from 2011-2020 and SPSS)

Table 2. Skewness and Kurtosis test of Normality

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
LDR (%)	120	-.091	0.221	5.061	0.438
SLAR (%)	120	1.815	0.221	3.743	0.438
NPL (%)	120	1.238	0.221	3.481	0.438
LG (RS)	120	-2.463	0.221	7.620	0.438
ROA (%)	120	-.400	0.221	5.666	0.438
ROE (%)	120	.439	0.221	1.007	0.438
NIM (%)	120	.199	0.221	1.386	0.438
Valid N (listwise)	120				

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Kurtosis should be within the +2 to -2 range when the data are normally distributed. (*Garson, 2012*). The table 2 above has showed that values of Skewness and Kurtosis of the standard error term are 0.221 and 0.438 respectively. Both values are within the range of -2 and 2. Thus, normality assumption is not violated.

Table 3. Shapiro-Wilk's W test of normality

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Loan to Deposit Ratio (%)	0.115	120	0.001	0.918	120	0.000
Statutory Liquid Asset Ratio (%)	0.159	120	0.000	0.809	120	0.000
Non-Performing Loan (%)	0.074	120	0.161	0.931	120	0.000
Liquidity Gap (RS)	0.207	120	0.000	0.737	120	0.000
Return on Asset (%)	0.121	120	0.000	0.888	120	0.000
Return on Equity (%)	0.094	120	0.011	0.969	120	0.007
Net Interest Margin (%)	0.076	120	0.089	0.970	120	0.009

As can be exhibited in Table 3 above, the Shapiro-Wilk's W test of normality resulted in W=0.000, 0.007 and 0.009 which were significantly less than 1. Thus, the assumption of normality of the data is not met.

Table 4 Correlation Matrix

		ROA	ROE	NIM	LDR	SLAR	NPL	LG
Pearson Correlat ion	ROA	1						
	ROE	0.743**	1					
	NIM	0.166	0.336**	1				
	LDR	0.207*	0.158	0.072	1			
	SLAR	0.095	-0.120	-0.027	-0.327**	1		
	NPL	-0.040	-0.169	0.214*	0.009	0.249**	1	
	LG	-0.105	-0.229*	0.229*	0.110	-0.064	0.085	1

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

*Correlation is significant at the 0.05 level (2-tailed).

(Source: Calculations Based on Annual Reports of Commercial Banks from 2011-2020 and SPSS)

The correlation between LDR and ROA showed that there was a positive significant relationship (0.207*) between these two variables at 0.01 level of significance. The correlation between NPL and NIM showed that there was a positive significant relationship (0.214*) between these two variables at 0.01 level of significance. The correlation between LG and ROE showed that there was a negative significant relationship (-0.229*) between these two variables at 0.01 level of significance. The correlation between LG and NIM showed that there was a negative significant relationship (0.229*) between these two variables at 0.01 level of significance.

Table 5 Collinearity Statistics.

Model	Collinearity Statistics		
	Tolerance	VIF	
1	Loan to Deposit Ratio (%)	.878	1.138
	Statutory Liquid Asset Ratio (%)	.827	1.209
	Non-Performing Loan (%)	.920	1.087
	Liquidity Gap (RS)	.978	1.022

(Source: Calculations Based on Annual Reports of Commercial Banks from 2011-2020 and SPSS)

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Table 5 represents the VIF for independent variables (LDR,SLAR NPL and LG) .As shown in tables 5 all VIF are less than 4 and tolerance are greater than 0.20, it suggested that multicollinearity was not a problem in this study. If VIF value was more than 4 and less than 1, that there was collinearity problem may occur. Therefore, in this study no multicollinearity problems between independent variables.

Table 6. Summary of Equation 1, Equation 2 and Equation 3

	R	R Square	Adjusted R Square	Std.Error of the Estimate	Durbin Watson
Equation 1	0.306 ^a	0.094	0.062	1.02102	0.828
Equation 2	0.333 ^a	0.111	0.080	8.77965	0.669
Equation 3	0.309 ^a	0.096	0.064	0.70141	0.931

- a. Predictors: (Constant), Liquidity Gap (RS), Non-Performing Loan (%), Loan to Deposit Ratio (%), Statutory Liquid Asset Ratio (%) (Source: Calculations Based on Annual Reports of Commercial Banks from 2011-2020 and SPSS)

Table 7. Regression Equation One

Model	Unstandardized Coefficients		Standardized Coefficients	t
	B	Std. Error	Beta	
(Constant)	-1.721	1.078		-1.596
LDR (%)	.027	.009	.286	3.022
SLAR (%)	.038	.018	.201	2.062
NPL (%)	-.048	.054	-.083	-.895
LG (RS)	-6.171E-013	.000	-.116	-1.293

From Table 7 above, the established multiple linear regression equation-1 has become:

$$ROA = -1.721 + 0.027 LDR + 0.038 SLAR - 0.048NPL - 6.171E-013 LG$$

Table 8. Regression Equation Two

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.080	9.272		.548	.585
LDR (%)	.142	.078	.171	1.823	.071
SLAR (%)	-.073	.159	-.045	-.462	.645
NPL (%)	-.706	.465	-.139	-1.518	.132
LG (RS)	-1.104E-011	.000	-.239	-2.690	.008

From Table 8 above, the established multiple linear regression equation-2 has become:

$$ROE = 5.080 + 0.142 LDR - 0.073 SLAR - 0.706 NPL - 1.104E-011 LG$$

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Table 9. Regression Equation Three

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.640	.741		4.915	.000
LDR (%)	.002	.006	.029	.305	.761
SLAR (%)	-.007	.013	-.057	-.586	.559
NPL (%)	.085	.037	.211	2.283	.024
LG (RS)	7.469E-013	.000	.204	2.278	.025

From Table 9 above, the established multiple linear regression equation-3 became:

$$\text{NIM} = 3.640 + 0.002 \text{ LDR} - 0.007 \text{ SLAR} + 0.085 \text{ NPL} + 7.469\text{E-}013 \text{ LG}$$

Table 10. ANOVA

		Sum of Squares	df	Mean of Square	F	Sig (p)
Equation 1	Regression	12.403	4	3.101	2.974	0.022 ^b
Equation 2	Regression	1104.385	4	276.096	3.582	0.009 ^b
Equation 3	Regression	5.984	4	1.496	3.041	0.020 ^b

a. Dependent Variable: Return on Asset (%), Return on Equity (%), Net Interest Margin (%)

b. Predictors: (Constant), Liquidity Gap (RS), Non-Performing Loan (%), Loan to Deposit Ratio (%), Statutory Liquid Asset Ratio (%)

(Source: Calculations Based on Annual Reports of Commercial Banks from 2011-2020 and SPSS.)

The findings implied that the independent variables were significant predictors of ROA.

The findings implied that the independent variables were significant predictors of ROE.

The findings implied that the independent variables were significant predictors of NIM.

In conclusion, the ANOVA test results indicated that the overall model was significant.

Table 11. Acceptance and rejection of Alternative Hypothesis

Hypothesis	Sign	Acceptation or Rejection
H ₁ :- There is a significant relationship between LDR and ROA of the licensed commercial banks in Sri Lanka	Positively significant	Accepted
H ₂ :- There is a significant relationship between SLAR and ROA of the licensed commercial banks of Sri Lanka	Positively significant	Accepted
H ₃ :- There is a significant relationship between NPL and ROA of the licensed commercial banks of Sri Lanka	Negatively Insignificant	Rejected
H ₄ :- There is a significant relationship between LG and ROA of the licensed commercial banks of Sri Lanka	Negatively Insignificant	Rejected
H ₅ :- There is a significant relationship between LDR and ROE of the licensed commercial banks of Sri Lanka	Positively Insignificant	Rejected
H ₆ :- There is a significant relationship between SLAR and ROE of the licensed commercial banks of Sri Lanka	Negatively Insignificant	Rejected
H ₇ :- There is a significant relationship between NPL and ROE of the licensed commercial banks of Sri Lanka	Negatively Insignificant	Rejected
H ₈ :- There is a significant relationship between LG and ROE of the licensed commercial banks of Sri Lanka.	Negatively significant	Accepted

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H₉ :- There is a significant relationship between LDR and NIM of the licensed commercial banks in Sri Lanka	Positively Insignificant	Rejected
H₁₀ :- There is a significant relationship between SLAR and NIM of the licensed commercial banks of Sri Lanka	Negatively Insignificant	Rejected
H₁₁ :- There is a significant relationship between NPL and NIM of the licensed commercial banks of Sri Lanka	Positively significant	Accepted
H₁₂ :- There is a significant relationship between LG and NIM of the licensed commercial banks of Sri Lanka	Positively Significant	Accepted

(Source: Developed For this Study).

CONCLUSION

This study was carried out to provide productive knowledge and ideas on how to increase financial performance of the banks to investors of the banks, policy makers, managements, practitioners and other stakeholders. The major purpose of this study was to examine the impact of liquidity risk on financial performance of the licensed commercial banks in Sri Lanka.

Inferential analysis was used to achieve specific objective of the study. It provided what is the impact of independent variables (loan to deposit, statutory liquid asset, non-performing loans and liquidity gap) on dependent variable (ROA, ROE and NIM). Therefore, during the test of the regression analysis (regression coefficient) and testing hypotheses of the study Loan to deposit and Statutory Liquid Asset had positive significant impact on ROA and insignificant relationship with ROE and NIM and also NPL had a positive significant relationship with NIM and negative insignificant relationship with ROA and ROE. Liquidity gap had negative significant impact on ROE, positive significant impact on NIM

RECOMMENDATIONS

The policy makers can consider when, they design targeted policies and programs that stimulate the growth and sustainability of the banks and promote the establishment of appropriate policies to guide the firms.

Few banks attempt to carry more cash in their reserves to meet the liquidity risk that affects the financial performance of bank as cash is always expensive. Banks should try to keep up more liquid assets other than cash.

Banks should continuously monitor the economic indicators to forecast the demands of depositors.

Special attention should be given to avoid the maturity mismatch between assets and liabilities.

Liquidity situation should be periodically monitored by the management of a bank. Understanding on the importance of adopting an appropriate liquidity practices and thus offer competitive advantage to the firms

The Central Bank should maintain a flexible minimum monetary policy (MPR) or discount rate so as to enable the deposit money banks take advantage of the alternative measures of meeting the unexpected withdrawal demands, and reduce the tendency of maintaining excess idle cash at expense of profitability.

SUGGESTIONS FOR FUTURE RESEARCH.

This study has focused primarily on ROA, ROE and NIM of the bank as measure of the financial performance of bank. Further research may take a broader view of the performance and can also include economic factors.

This study was considered about only four dimensions of liquidity risk. Using more dimensions can be identified depth relationship between liquidity risk and financial performance. Hence, suggest that use more dimension in the future study than current research.

There are twenty-four commercial banks are operated in Sri Lanka but this study has taken only twelve banks are taken as sample so it consist of small number of banks. To generalize the analysis the sample size would be increased.

Only some methods are used to test hypothesis such as descriptive statistics, correlation, regression and ANOVA. Further the researchers can add much variety of techniques to generalize their findings.

Only secondary data are collected to analysis to do this study. Further researchers may use primary data by visiting to every Banks. This study consider only from 2011 to2020. There is a research gap previous years. Going forward, this study could serve as a stepping stone for additional work. One could apply the current framework to additional countries, perhaps focusing on those with and without pre-existing bank liquidity risk problems

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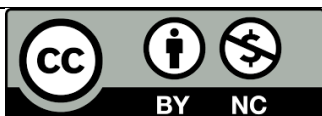
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