RELATIVE STANDING OF ROE AND ROCE IN EFFECTIVE LIQUIDITY MANAGEMENT: EVIDENCE FROM BANGLADESHI COMMERCIAL BANKS

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ABSTRACT

This study has been designed for examining the effectiveness of liquidity management through the relative standing of ROE and ROCE of Nationalized Commercial Banks in Bangladesh for the duration of 2008–2018. Six NCBs are selected purposively as sample. The study relies on a balanced panel data set of 66 observations which are gathered from the annual reports of banks and analyzed by random effects regression model. However, the research only examined a few variables. The empirical results reveal that the selected NCBs have been portraying better standing in case of ROE than ROCE in effective liquidity management. The value of R^2 of ROE is 75.25%; it signifies that the explanatory measures could clarify 75.25% of the variations in ROE. Among the liquidity measures, Assets/Shareholders Equity has highly significant negative effect; Tier 1 Capital/Risk Weighted Assets has highly significant positive effect; Deposits/Assets have some significant positive and Bank Size in terms of Deposits has some significant negative effect on ROE of the selected NCBs.

Keywords: Bangladesh, Commercial Bank, Effective Liquidity Management, ROE, ROCE.

JEL Classification Codes: E44, G14, G21, O16.

PRELUDE

Banking system is one of the major components of financial system for ensuring its continued existence. According to Wilner (2000), efficient banking system acts as a means for the accumulation of deposit funds and investing those funds in a productive manner. Without effective liquidity management, banks with intense foundation and bright future may not be profitable (Jose et al., 1996). Therefore liquidity management involves the strategic administration of inflows and outflows of banks' funds that will concurrently maintain liquidity, profitability and solvency of banks. Agbada and Osuji (2013) articulated that with a view to achieving these conflicting objectives, liquidity management requires to be efficient in the

circulation of liquidity compatible with a preferred level of cash without twisting the profitability and functions of the bank.

Banking structure of Bangladesh

Bangladesh has an assorted banking sector of 60 scheduled banks consisting of 06 Nationalized Commercial Banks, 03 Specialized Banks, 42 Private Commercial Banks and 09 Foreign Commercial Banks. Out of 42 Private Commercial Banks, 32 banks are interest based whereas 8 are interest free (www.bb.org.bd/fnansys/bankfi.php).

LITERATURE REVIEW

Basel Committee on Banking Supervision (2008) explained that bank's sustainability is dependent on the liquidity position as it measures the role of bank in maintaining cash flow. According to Central Bank of Barbados (2008), liquidity problem may usually influence a bank's profits and capital and exceptional circumstance, due to liquidity problem a solvent bank may become insolvent. Jenkinson (2008) found that liquidity problem simultaneously affects both the performance and reputation of a bank. According to Aspachs et al. (2005), banks can use three methods to indemnify against liquidity risks. Such as (i) seizing bumper of liquid assets (ii) relying on interbank market (iii) relying on central bank-a lender of last resort.

Hirigoyen (1985) agreed that low liquidity leads to low profitability. Chandra (2001) claimed that usually high liquidity acts as a signal of financial strength. AssafNeto (2003) argued that both high and low liquidity are undesirable. According to Goddard et al. (2004), holding liquidity causes an opportunity cost and thereby having a negative consequence on profit making ability of banks. Gup and Kolari (2004) claimed that bank management should extend a liquidity plan that makes a balance between risks and returns. Koch (1992); Sufian and Chong (2008) believed that as maintenance of liquidity bears both risk and return, a trade-off between liquidity and profit base can minimize the conflict.

Repullo (2003) found that liquidity management depends on hybrids of theories that are typically employed to obtain optimality. Considering Shiftability theory, Dodds (1982) suggested that assets must meet three conditions-"shiftability, marketability or transferability" in order to ensure convertibility of the assets. Based on Anticipated Income theory, Nzotta (1997) identified two fundamental factors-earning capability and creditworthiness of a borrower which can be regarded as the undertaking for assuring sufficient liquidity. According to Liability Management theory, Emmanuel (1997) suggested that the central bank or sister banks can come forward to lend money if other banks urgently require funds. He also propagated a very conservative outlook when he asserted that the banks do not lend money for long term, due to the long payback period. Hence Commercial Loan theory is only applicable for short period, self-liquidating loans.

Agbada and Osuji (2013) experienced that the soundness of banks can be enhanced by efficient liquidity management. According to Kurawa and Abubakar (2014); Obida and Owolabi (2012), liquidity management measures the growth and financial performance of a bank. As per Nwankwo (1991), liquidity management requires assessing liquidity needs and meeting up those needs at all times without incurring any significant costs. It is asserted that adequate liquidity at normal market interest rate is crucial for both large and small banks to meet all types of liabilities. It is also said that adequate liquidity may help a bank to face three kinds of liquidity risks: (i) risk of funding (ii) default risk (iii) risk of failure to honor maturity obligations of customers.

According to Lartey et al. (2013), there is a very insignificant but positive association between optimum levels of liquidity and profit base. According to Osborne et al. (2012), the association between liquidity and profit base becomes more positive in the distress of banking sector. Arif and Anees (2012); Datta et al. (2011); Adebayo et al. (2011) observed that profit base is significantly influenced by liquidity in the form of deposits. Rauch et al. (2010) found that profit base is negatively associated with liquidity. Other things held constant, adequate liquidity can improve profit base of banks (Bernanke, 2008). Flannery and Rangan (2008) asserted that due to sudden shock or regulatory requirements, if liquidity of banks exceeds their optimum level reduces profit base only. Jahangir et al. (2007) argued that loan deposit ratio works as an important determinant of banks' profitability. Hossain (2000) indicated that high percentage of fixed to total deposits influence the profitability performance of NCBs.

Lucy et al. (2018) found that liquidity has significant positive effect on ROCE. Agbada and Osuji (2013) explored that adequate capital is a must for maximizing ROCE. Raza, Farhan, and Akram (2011) affirmed that ROCE is one of the major measures to measure profitability. Alshatti (2015) recommended that quick ratio and investment ratio are positively associated with ROE whereas capital ratio and liquid asset ratios are negatively associated with ROE. According to Bassey (2015), cash ratio, loan to deposit ratio, current ratio, loan to asset ratio and liquid ratio are significantly related with ROE. Olarewaju and Adeyemi (2015) stated that there is no causal relationship between loan deposit ratio and ROE. According to Abdullah and Jahan (2014), all other things held constant, the more liquid bank tends to have lower ROE. Tabari, Ahmadi, and Emami (2013) acknowledge that ROE is one of the substitutes to measure profit base of a bank. Ramadan et al. (2011) showed that there is an association between ROE and the efficacy of credit management. According to Ahmed et al. (2006), in order to fortify the economic conditions of a country, NCBs must improve their performance evaluation metrics such as NPL, ROA and ROE. Siddique (2004) recognized that NPL is one of the outcomes of poor bank fund management.

In the above sections the researcher has conducted an extensive review of literatures over banks' liquidity management nationally and internationally. It is found that maximum studies have been conducted over management of liquidity and banking performance, liquidity-profitability relationship, and role of liquidity on banks' profitability. However, relative standing of profitability measures in effective liquidity management in Bangladesh remains an unexplored area. Hence, the present study has been carried out to evaluate the relative standing of ROE and ROCE of NCBs in efficient liquidity management.

OBJECTIVES OF THE STUDY

The key objective of this study is to analyze the relative prominence of ROE and ROCE in effective liquidity management of NCBs. This objective basically attempts:

- To evaluate the descriptive features of both liquidity and profitability measures of respective banks;
- To analyze the liquidity measures that influence both the ROE and ROCE;
- To measure the association between liquidity measures and selected profitability measures;
- To appraise the comparative position of ROE and ROCE in ensuring effective liquidity management of selected NCBs;
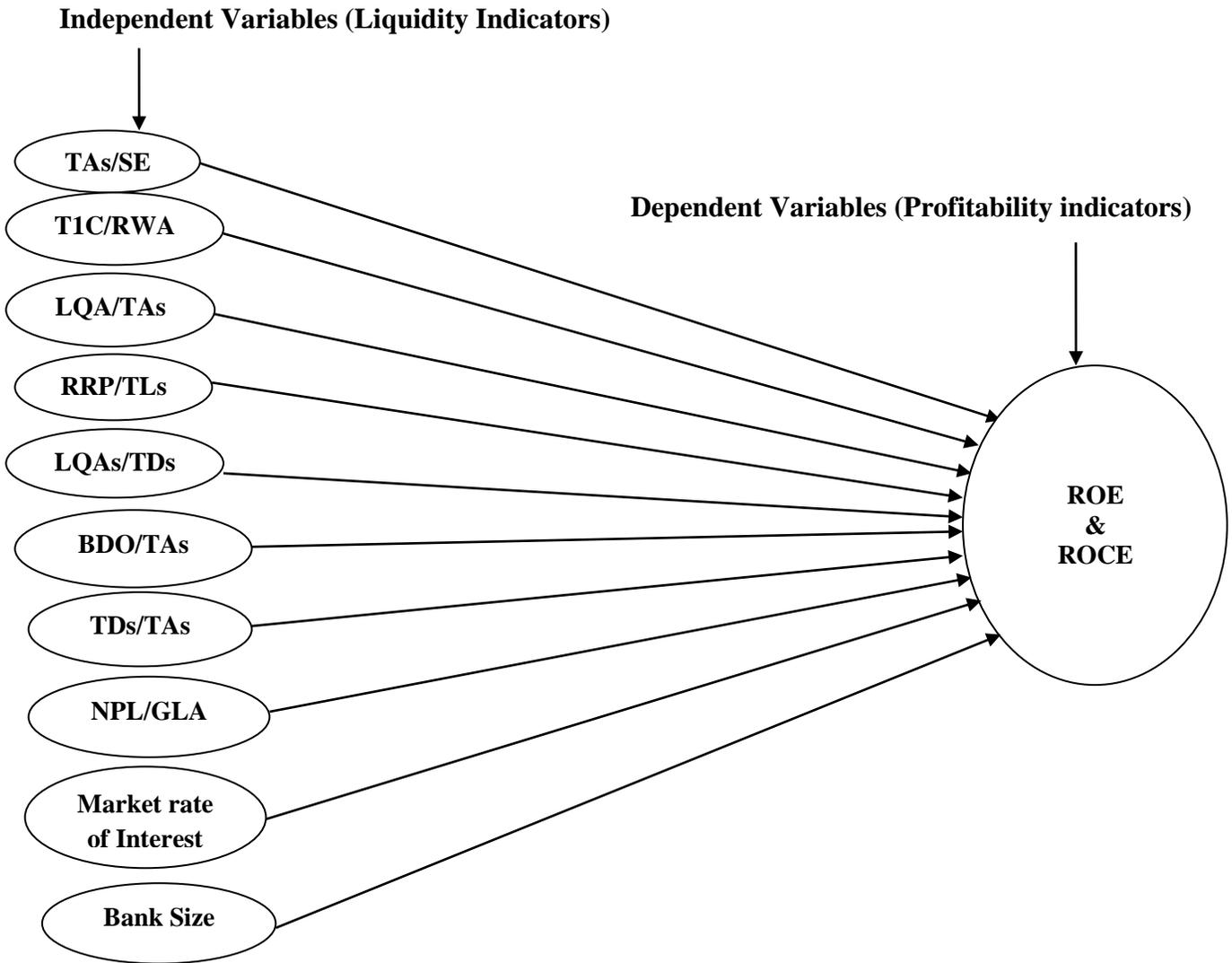
THEORETICAL FRAMEWORK

Independent Variables (Liquidity Indicators)

Figure 1. Theoretical Framework

METHODOLOGY OF THE STUDY

Research Design

The study is descriptive as well as analytical in nature. It is descriptive as it demonstrated the effectiveness of liquidity management of NCBs in Bangladesh through the measures of relative standing of its ROE and ROCE. This study is analytical in the sense that it carried out a panel data analysis for testing hypothesis and interpreting relationship by analyzing available information. Basically, the study intends to provide an appropriate strategy for the effective liquidity management of NCBs in Bangladesh.

Hypotheses of the Study

H_{01}: There is no statistically significant relationship between liquidity and ROE of NCBs

H_{11}: There is a statistically significant relationship between liquidity and ROE of NCBs

H_{02}: There is no statistically significant relationship between liquidity and ROCE of NCBs

H_{12}: There is a statistically significant relationship between liquidity and ROCE of NCBs

Specification of the Model

Model 1: ROE= $A+ \beta_1$ (TAs/SE) + β_2 (T1C/RWA) + β_3 (LQA/TAs) + β_4 (RRP/TLs) + β_5 (LQA/TDs) + β_6 (BDO/TAs) + β_7 (TDs/TAs) + β_8 (NPL/GLA) + β_9 (MRI) + β_{10} (BSZ) + e

Model 2: ROCE= $A+ \beta_1$ (TAs/SE) + β_2 (T1C/RWA) + β_3 (LQA/TAs) + β_4 (RRP/TLs) + β_5 (LQA/TDs) + β_6 (BDO/TAs) + β_7 (TDs/TAs) + β_8 (NPL/GLA) + β_9 (MRI) + β_{10} (BSZ) + e

Where, ROE and ROCE are the dependent variables, A is the constant term, β's measures the coefficient of explanatory variables, variables in the parenthesis are the explanatory variables and 'e' denotes the stochastic disturbance term.

Table 1. Elucidation of dependent and independent variables and their replacements

Variables	Formula/ Definition	Unit
Dependent Variables		
ROE	Net income/ Shareholders equity	%
ROCE	EBIT/(Total assets-current liabilities)	%
Independent Variables		
TAs/SE	Total assets/Shareholders equity	%
TIC/RWA	Tier 1 capital/Risk weighted assets	%
LQA/TAs	Liquid asset/Total assets	%
RRP/TLs	Reverse Repo Purchase/Total liabilities	%
LQA/TD	Liquid asset/Total deposits	%
BDO/TAs	Balance due other banks/Total assets	%
TDs/TAs	Total deposits/Total assets	%
NPL/GLA	Nonperforming loan/Gross loan & advances	%
MRI	Market rate of interest	%
BSZ	Bank size in terms of total deposits	Natural logarithm of total deposit

Source: Compiled by the researcher from the annual reports of banks

Choice of Population, Sample Size and Sampling method
According to Bangladesh Bank, the no. of scheduled NCBs in Bangladesh is 06. Accordingly the researcher opted for 06 NCBs purposively.

Collection and Analysis of Data
The study is mainly dependent on secondary data that have been gathered from yearly published information of selected NCBs. This balanced panel data sets of 66 observations throughout the period of 2008-2018 have been evaluated by some descriptive statistics, pairwise correlation, ratio analysis and ultimately, random effects regression model.

FINDINGS AND DISCUSSIONS
Analysis of Features of Liquidity Indicators and Profitability Indicators of selected NCBs

Table 2. Descriptive Analysis of related variables

Measures	ROE	ROCE	TAs / SE	TIC / RWA	LQA/ TAs	RRP/ TLs	LQA/ TD	BDO/ TAs	TDs / TAs	NPL/ GLA	MRI	BSZ
Mean	0.18	1.99	17.44	5.14	9.22	5.30	12.74	1.20	80.32	18.90	11.78	5.54
Range	301.18	19.77	68.60	30.95	12.66	5.98	18.87	5.44	15.52	29.98	4.19	1.19
Max.	41.28	9.85	52.87	9.78	17.25	9.64	26.17	5.44	85.93	35.28	13.75	6.04
Min.	-259.90	-9.92	-15.73	-21.17	4.59	3.66	7.30	0.00	70.41	5.30	9.56	4.85
Std. Dev.	43.70	2.83	10.28	5.52	2.87	1.08	4.27	1.29	3.78	7.60	1.32	0.30
CV	247.45	1.42	0.59	1.07	0.31	0.20	0.34	1.08	0.05	0.40	0.11	0.05

Notes: i) Data have been compiled by the researcher
ii) Analysis Mode: SPSS (version 24.0)

From the above analysis the study has found that the selected banks have maintained the highest average liquidity ratio i.e 80.32% in terms of TDs/TAs which is authenticated by standard deviation of 3.78%, and range of 15.52%; and the lowest average liquidity ratio i.e 1.20% in terms BDO/TAs which is authenticated by standard deviation of 1.29%, and range of 5.44% during study periods. Between these two liquidity ratios, TDs/TAs indicates minimum risk in terms of CV i.e 0.05%. It has been observed that average rate of profitability in terms of ROE and ROCE is 0.18% and 1.99% respectively. Between two profitability indicators, the maximum & minimum ratio of ROE has shown maximum fluctuation during the study periods. This situation is authenticated by standard deviation of 43.70%, and range of 301.18%. It indicates that selected banks are exposed to more risk in generating profit in terms of ROE than ROCE while managing liquidity. This signifies that selected NCBs should give due consideration to ROE particularly in making profit while constructing liquidity management policies & implementing thereof.

Regression Analytical Tests
Normality Test

Table 3. Shapiro-Wilk Test for Normality

Variable	p value
ROE/ROCE	0.12 / 0.08
TAs/SE	0.08
TIC/RWA	0.43
LQA/TAs	0.06
RRP/TLs	0.20
LQA/TD	0.22
BDO/TAs	0.11
TDs/TAs	0.06
NPL/GLA	0.58
MRI	0.18
BSZ	0.21

Notes: i) Data have been compiled by the researcher
ii) Analysis Mode: STATA (version 12.0)

From table 3, it is clear that the data used in this study is normally distributed as p value > 0.05.

Multicollinearity Test

Table 4. Analysis of Correlation between Liquidity indicators and Profit base of selected NCBs

	ROE	ROCE	TAs/SE	TIC/RWA	LQA/TAs	RRP/TLs	LQA/TD	BDO/TAs	TDs/TAs	NPL/GLA	MRI	BSZ
ROE	1											
ROCE	.101	1										
TAs/SE	-.572**	-.352*	1									
TIC/RWA	.378*	-.178	.312*	1								
LQA/TAs	.037	-.165	.160	.157	1							
RRP/TLs	.079	-.173	-.055	.136	.356*	1						
LQA/TD	.099	-.077	.098	.268	.788**	.226	1					
BDO/TAs	.065	.237	-.394**	-.483**	.105	.043	-.023	1				
TDs/TAs	.126	-.192	.006	-.073	.435**	.235	.196	.347*	1			
NPL/	-.258	-.144	.144	-.190	.038	.205	-.004	-.113	.017	1		

GLA												
MRI	-.237	.201	.057	-.219	-.348*	-.181	-.481**	.182	-.212	-.067	1	
BSZ	-.047	-.464**	.287	.488**	.184	.409**	.222	-.490**	.168	.333*	-.324*	1

Notes: i) Data have been compiled by the researcher
ii) Analysis mode: SPSS (version 24.0)
iii) *Correlation is significant at the 5% level
** Correlation is significant at the 1% level

From table 04, it is observed that as the correlation between the variables is below the maximum limit of 0.80, so the variables are beyond multicollinearity problem which is supported by Kennedy (2008).

Another important method of identifying multicollinearity is the Variance Inflation Factor (VIF). According to Gujarati and Sangeetha (2008), if the VIF value exceeds 10, the variable is considered to be highly collinear. The VIF test result for all the explanatory variables are shown in appendix 1A where there is no existence of multicollinearity problem as the VIF value of the variables is less than 10.

Heteroskedasticity Test

White's heteroskedasticity test is applied to measure the difficulty of heteroskedasticity in a linear regression model (Gujarati, 1995). The outcomes of both analysis indicate that there is no evidence for the existence of heteroskedasticity, as the calculated values 44.00 < the critical value 79.49 as shown in appendix 1B and 1C.

Test of Autocorrelation

One of the most popular tests for the detection of autocorrelation is Wooldridge (2002) statistic which signifies that there is no autocorrelation, as presented below:

Table 5. Wooldridge Test for Autocorrelation

ROE	ROCE
Ho: no first –order autocorrelation	Ho: no first –order autocorrelation
F (1, 3) = 4.733	F (1, 3) = 1.736
Prob > F = 0.1178	Prob > F = 0.2792

Notes: i) Data have been compiled by researcher
ii) Analysis mode: STATA (version 12.0)

Hausman Specification Test

A Hausman Test (1978) has been applied to measure the appropriateness of Random versus Fixed effects model which is reported in appendix 1D and 1E. After running the Hausman test, both Prob>chi2 value of ROE and ROCE are 0.3881 and .8494 respectively, which are greater

than 0.05. Therefore the Random Effects model is statistically appropriate for both the model of the study.

Random Effect (RE) tests on Model 1 (ROE) and Model 2 (ROCE)

Table 6. Position of ROE and ROCE in the Effectiveness of Liquidity Management

Variables	Model 1 (ROE)	Model 2 (ROCE)
Constant	79.3944	23.9873*
TAs/SE	-3.2398***	-.0787
TIC/RWA	6.0589***	.0709
LQA/TAs	.1159	-.1708
RRP/TLs	-.4326	.0154
LQA/TD	-.5235	.1532
BDO/TAs	-3.5083	-.0177
TDs/TAs	3.1273**	-.032
NPL/GLA	.5269	.0333
MRI	-2.5484	.3275
BSZ	-49.2252**	-4.2098*
F	**10.03**	**1.271**
R^2	**.7525**	**.2493**
Adjusted R^2	**.5925**	**.0530**
No. of observations	**66**	**66**

Notes: i) Data have been compiled by researcher
ii) Analysis mode: STATA (version 12.0)
iii) Standard errors in parentheses $^*p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$

From RE regression Model 1, it has been observed that the variables TAs/SE & TIC/RWA are significant at 1% level and TDs/TAs & BSZ at 5% level. The rest of the variables are found insignificant. The value of R^2 is 75.25%; it signifies that the explanatory variables could clarify 75.25% of the variations in ROE. F value of statistics is also found significant. F value of statistics is also found significant.

From RE regression Model 2, it has been observed that almost all the explanatory variables are found insignificant even BSZ as it is significant at 10% level. The value of R^2 is 24.93%; it signifies that the explanatory variables could clarify only 24.93% of the variations in ROCE. F value of statistics is also found insignificant.

These imply that standing of ROE compared to ROCE is more significant in the effectiveness of liquidity management of selected NCBs in Bangladesh. Accordingly, in case of Model 1 the null hypothesis is rejected and alternative hypothesis is accepted. That is, there is a statistically significant association between ROE and liquidity of NCBs. On the other hand, the null hypothesis of Model 2 is accepted indicating that there is no statistically significant association between ROCE and liquidity of NCBs.

CONCLUSION AND RECOMMENDATIONS

The study is attempted to figure out the relative standing of ROE and ROCE in the effectiveness of liquidity management of NCBs in Bangladesh. It is found that ROE represents better standing than ROCE in case of effective liquidity management. The ROE is mainly influenced by TAs/SE, TIC/RWA, TDs/TAs and BSZ liquidity measures. Among the explanatory measures, TAs/SE has highly significant negative and TIC/RWA has highly significant positive effect on ROE; TDs/TAs has some significant positive and BSZ has some significant negative effect on ROE of the selected NCBs.

The conclusion recommends that NCBs that can increase its core capital will act as a defender in protecting consumers against unexpected losses and to exude financial strength. Papa (2012) said that banks can simply drive up ROE by holding relatively higher levels of Tier 1 capital. According to Abugamea (2018); Ramadan et al. (2011), profitability in terms of ROE tends to be associated with well capitalized banks. Abugamea (2018) also asserted that ROE is inversely related to deposits which is supported by the ratio BSZ in terms of total deposits. But higher deposits to assets ratio is linked with improved financial sufficiency, as deposits are the stable sources of fund for funding assets (Mwangi et al., 2015). There is a common phenomenon that banks' profitability is extensively affected by its higher total assets provided the assets are financed by stock rather than debt. Ramadan et al. (2011) showed that there is an association between ROE and the efficacy of credit management.

Based on the empirical assessment, the researcher recommends that NCBs should accept a more professional liquidity management strategy to insure such conflicting objectives of banks-liquidity, profitability and solvency. Agbada and Osuji (2013) articulated that with a view to achieving these conflicting objectives, liquidity management requires to be efficient in the circulation of liquidity compatible with a preferred level of cash without twisting the profitability and functions of the bank. Without effective liquidity management, banks with intense foundation and bright future may not be profitable (Jose et al., 1996).

LIMITATIONS OF THE STUDY

The study has considered a limited no. of variables and only four selected NCBs in Bangladesh as sample. Therefore the size of the sample might be increased for measuring the actual effect of exogenous variables on the dependent variable. New research could be suggested for measuring the relative standing of other profitability measures not only on NCBs but also on other banking structure in Bangladesh to appraise whether the liquidity is effectively managed or not.

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APPENDICES

Appendix-1 A: VIF Results

Variable	VIF value	Tolerance
LQA/TAs	3.92	0.26
LQA/TDs	3.57	0.28
BSZ	2.64	0.38
BDO/TAs	2.28	0.44
TIC/TRW	1.97	0.51
TDs/TAs	1.83	0.55
MRI	1.57	0.64
RRP/TLs	1.53	0.65
TAs/SE	1.47	0.68
NPL/GLA	1.46	0.68
Mean VIF	**2.22**	

Notes: i) Data have been compiled by researcher
ii) Analysis mode: STATA (version 12.0)

Appendix-1 B: White's Heteroskedasticity Test on ROE

Source	Chi²	df	p
Heteroscedasticity	66.00	43	0.4290
Skewness	31.78	10	0.0004
Curtosis	0.89	1	0.3460
Total	76.67	54	0.0229

Notes: i) Data have been compiled by researcher
ii) Analysis mode: STATA (version 12.0)

Appendix-1C: White's Heteroskedasticity Test on ROCE

Source	Chi²	df	p
Heteroscedasticity	66.00	43	0.4290
Skewness	8.99	10	0.5330
Curtosis	1.50	1	0.2212
Total	54.49	54	0.4559

Notes: i) Data have been compiled by researcher
ii) Analysis mode: STATA (version 12.0)

Appendix-1D: Hausman Test on ROE

ROE	Coefficients			
	b Fixed	B Random	b-B Differences	sqrt (diag(V_b-V_B)) SE
X_1: TAs/SE	-3.2444	-3.2398	-.0047	.1409
X_2: TIC/TRW	5.8043	6.0589	-.2546	.2472
X_3: LQA/TAs	1.9815	.1159	1.8656	1.1810
X_4: RRP/TLs	.2120	-.4326	.6446	1.7642
X_5: LQA/TD	.3758	-.5235	.8993	.6923
X_6: BDO/TAs	-6.4881	-3.5083	-2.9798	2.2446
X_7: TDs/TAs	3.5190	3.1273	.3917	.4181
X_8: NPL/GLA	.6512	.5269	.1242	.8021
X_9: MRI	-2.9912	-2.5484	-.4428	.8258
X_{10}: BSZ	-102.4167	-49.2252	-53.1915	31.7284

Notes: i) Data have been compiled by the researcher

ii) Analysis Mode: STATA (version 12.0)

iii) b = consistent under Ho and Ha; obtained from xtreg

B= inconsistent under Ha, efficient under Ho; obtained from xtreg

iv) Test: Ho: difference in coefficients not systematic

$Chi2 (3) = (b-B)^1[(V\_b-V\_B)^{\wedge}(-1)] (b-B)=3.02$

$Prob>chi2 = 0.3881$

Appendix-1E: Hausman Test on ROCE

ROCE	Coefficients			
	b Fixed	B Random	b-B Differences	sqrt (diag(V_b-V_B)) SE
X_1: TAs/SE	-.0784	-.0787	.0002	.0153
X_2: TIC/TRW	.0804	.0709	.0095	.0269
X_3: LQA/TAs	-.1229	-.1708	.0480	.1283
X_4: RRP/TLs	.0717	.0154	.0563	.1917
X_5: LQA/TD	.1267	.1532	-.0264	.0752
X_6: BDO/TAs	.1107	-.0177	.1284	.2439
X_7: TDs/TAs	-.0016	-.0320	.0304	.0454
X_8: NPL/GLA	.0108	.0333	-.0225	.0872
X_9: MRI	.3137	.3275	-.0138	.0897
X_{10}: BSZ	-4.3824	-4.2098	-.1726	3.4475

Notes: i) Data have been compiled by the researcher

ii) Analysis Mode: STATA (version 12.0)

iii) b = consistent under Ho and Ha; obtained from xtreg

B= inconsistent under Ha, efficient under Ho; obtained from xtreg

iv) Test: Ho: difference in coefficients not systematic

$Chi2 (3) = (b-B)^1[(V\_b-V\_B)^{\wedge}(-1)] (b-B)=0.80$

$Prob>chi2 = 0.8494$

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CONFLICT OF INTEREST STATEMENT
The authors declare that they have no competing interests.

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