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OPTIMUM BALANCE BETWEEN LIQUDITY AND PROFITABILITY:A STUDY AMONG SRI LANKAN FINANCIAL COMPANIES

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Abstract
This study has examined the relationship between liquidity and profitability of selected Banks, Finance and Insurance Companies in Sri Lanka. It has been selected a sample of 25 Banks, Finance and Insurance Companies listed on the Colombo Stock Exchange for a period 5 years from 2011 to 2015.The main objective is to examine the nature and extent of the nexus between liquidity and profitability of selected Banks, Finance and Insurance Companies in Sri Lanka. Descriptive statistics, Correlation analysis and Regression analysis are used to examine the nature and extent of the relationship between the variables and determine whether any cause and effect relationship between them.

The regression results of the study demonstrate that Liquidity impact on profitability at the 54.7% level based on return on assets (ROA). The results further reveal thatthere is a significant impact of the total deposit ratio on ROA while other ratios such as cash position indicator, current ratio and quick ratio are insignificant on ROA. The Overall conclusion of this study is that there is significant impact of liquidity on profitability based on return on assets in Sri Lankan Banks, Finance & Insurance Companies.

The study suggestions are recommended to increase profitability based on liquidity maintenance. Consider the capital stature is one of the major factors of determination of its' Profitability. Identifying weaknesses of investment, should not pursue extreme liquidity policies, should engage competent and qualified personnel in order to ensure that right decisions,Motivating the depositor, the government should control the inflation. This study can be further developed using the data for more time period and then can have a better conclusion and finding of the profitability.

Key Words: Liquidity, Profitability, Total Deposit Ratio, Cash Position Indicator.

Background of the Study

Liquidity plays a role in determining the profit levelof the company, and maintaining liquidity is the key factor whether it is involved in the customer convenience and satisfaction. It should keep adequate levels if the management is likely to confront an uncertain environment but how low or how high is the basic question. The assets of the company can be financed by the owner or the loaner and the depositors. Maintains both liquidity and profitability decision is significant managerial decision, as it influences the shareholder return, risk, and customer satisfaction. Market share is also affected by these items. The bank has to plan its liquidity initially atthe time of its promotion. Subsequently, whether the funds have to be raised, a profitable decision is involved. A firm should ensure that it does not suffer from lack-of or excess liquidity to meet its short-term compulsions. A study of liquidity is of major importance to both the internal and the external analysts because of its close relationship with day-to-day operations of a firm. Business financing, especially in the wake of the global financial crisis, has become a major source of concern for business managers as bank loans are becoming too expensive to maintain as a result of tightening of both the local and international financial market and the reluctance of the public to invest in the share of companies sequel to the crash of the capital market. These situations compel business managers to devise various strategies of managing internally generate revenue to enhance their chances of making profit and meeting existing shareholder expectations.

Liquidity and profitability are very important in the development, survival, sustainability, growth and performance. Profitability does not translate to liquidity in all cases. A firm may be profitable without necessarily being liquid. Therefore, liquidity should be managed in order to obtain an optimal level, that is, a level that avoids excess liquidity which may translate to poverty of ideas by management. Also,the liquidity level should not fall below minimum requirement as it will lead to the inability of the organization to meet short term obligation.Profitability and liquidity are the most prominent issues that the management of each organization should take studying and thinking about them into account as their most important duties. Liquidity refers to the ability of a firm to meet its short term obligations. Liquidity plays a crucial role in the successful functioning of a firm. A study of liquidity is of major importance to both the internal and external analysts because of its close relationship with day to day operations of firms. A weak liquidity position poses a threat to the solvency as well as profitability of a firm and makes it unsafe and unsound.

Profitability is a measure of the amount by which firms' revenues exceed its relevant expenses. Potential investors are interested in dividends and appreciation in the market price of stock, so they pay more attention onthe profitability ratios. Managers on the other hand, are interested in measuring the operating performance in terms of profitability. Hence, a low profit margin would suggest ineffective management and investors would be hesitant to invest in the company.

Alshatti(2015) investigated the effect of liquidity management on profitability in the Jordanian commercial banks during the time period (2005–2012). Thirteen banks have been chosen to express on the whole Jordanian commercial banks. The liquidity indicators are investment ratio, Quick ratio, capital ratio, net credit facilities total assets and liquid assets ratio, while return on equity (ROE) and return on assets (ROA) where the proxies for profitability.Mwizarubi, Singh, and Prusty(2015) have done a research on the topic of the relationship between banks' profitability and liquidity by using three different models. It is a longitudinal study whereby five banks from Tanzania were taken into consideration for the time period from year 2006 to 2013. All the models revealed that there is no statistically significant relationship between banks' profitability and liquidity.

Nedunchezhian and Premalatha(2015) had investigated the relationship between liquidity and profitability of the Indian private sector banks. Five out of the twenty new private sector banks and new private sector banks involved in the study. The result provides that there is no significant relationship between ROA with cash and bank balances to total liabilities. Das,Chowdhury,Rahman and Dey(2015) studied the liquidity management scenario of private commercial banks in Bangladesh along with profitability analysis. Firstly, some private commercial banks were selected and divided them into three generations based on their establishment. Secondly deposit, advance, profit, AD ratio & profit growth were considered as parameters to calculate several techniques to analysis the liquidity and profitability. The study concluded that proper liquidity management can increase the profitability of the Banks if other factors move positively.

Godwin andMoses(2015) have done a research on the topic of "the liquidity-profitability trade off of deposit money banks in Nigeria". The empirical results revealed that there is a statistically significant relationship between bank liquidity measures- current ratio, liquid ratio, cash ratio, loans to deposit ratio, loans to asset ratio- and return on equity. Marozva(2015) has done an empirical research on the relationship between liquidity and bankperformance for South African banks for the period between 1998 and 2014. The study observes that there is a negative significant deterministic relationship between net interest margin and funding liquidity risk. However, there is an insignificant co-integrating the relationship between net interest margin and the two measures of liquidity. Khan, Ali and Khan(2015) analyzedevaluating and comparatively analyzing the financial performance of all full-fledged Islamic banks operating in Pakistan and five Islamic banks from Malaysia conveniently chosen, subject to profitability and liquidity. Thuraisingam(2015) investigated The Effects of Liquidity Management on Firm Profitability from Sri Lankan Listed Companies. The research findings shown that there is no significant relationship between liquidity and profitability. These results are consistent with prior empirical studies.

Chukwunweike(2014) investigated the Impact of Liquidity on Profitability of Some Selected Companies. The overall findings of this study indicate that there is a significant positive correlation between current ratio and profitability,there is no definite significant correlation between Acid-test ratio and profitability, there is no any significant positive correlation between return on capital employed and profitability. Lartey, Antwi1, Boadi and Polytechni(2013) tried to find out the relationship between the liquidity and the profitability of banks listed on the Ghana Stock Exchange. It was found that for the period 2005-2010, both the liquidity and the profitability of the listed banks were declining. Again, it was also found that there was a very weak positive relationship between the liquidity and the profitability of the listed banks in Ghana.Ibe(2013) investigated the impact of liquidity management on the profitability of banks in Nigeria. The result of this study has shown that liquidity management is indeed a crucial problem in the Nigerian banking industry.

Akter and Mahmud (2014) explored the relationship between liquidity (measured as current ratio) and profitability (measured as return on assets) in the banking industry in Bangladesh. Finally, they concluded that, there is no significant relationship between liquidity and profitability in banks of different sectors in Bangladesh. Jeevarajasingam (2014) investigated the impact of liquidity on profitability of the banking sector in Sri Lanka from 2008 to 2012. To conduct this research, samples were selected from all commercial banks in Sri Lanka. There is no significant impact of liquidity on profitability of the banking sector in Sri Lanka.

The liquidity and profitability goals are contradictory to each other in most decisions which the finance manager takes. In addition to this, referring to the risk, return theory, there is a direct relationship between risk and return. Thus, firms with high liquidity may have a lower risk and then low profitability. Conversely, a firm that has low liquidity may face high risk results to higher return. Consequently, a firm is required to maintain a balance between liquidity and profitability in its day-to-day operations.

In the performance of this financial inter-mediation role, the financial institutions have proved to be an effective channel between savers and borrowers. Among the financial institutions that make themselves available for this all-important role are merchant banks, savings banks, the Central bank, development banks and commercial banks. The firm's liquidity should not be too high or too low. Excessive dependence on liquidity indicates the accumulation of idle funds that don't fetch any profits

for the firm (Smith, 1980). On the other hand, insufficient liquidity might damage the firm's goodwill, deteriorate firm's credit standings and that might lead to forced liquidation of a firm's assets. Liquidity management is indeed a crucial problem in the banking industry (Ibe, 2013**)**. Hence, the present study is initiated to examine the impact of liquidity on profitability of banks, finance and insurance companies in Sri Lanka.

Methodology

According to the research problem and conceptual model is defined as the dependent variables are returned on assets (ROA). This study identified as anindependent variables are cash position indicator (CPI), current ratio (CR), total deposit ratio (TDR) and a quick ratio (QR). In conducting the study a sample of 25 listed banks, finance and insurance companies are taken from banking, finance and insurance sector of Colombo Stock Exchange (CSE) from 2011 to 2015.All required secondary data have been obtained directly from the sources of CSE, and the financial statements of the companies in the sample.

Data Presentation and Analysis

According to the Table 1 return on assets and return on equity are the dependent variable of this study. The minimum, maximum and mean values of ROA are -0.014, 0.119 and 0.023 respectively. Its standard deviation is 0.01. Standard error is an indication of the reliability of the mean. A small standard error is an indication that the sample mean is a more accurate reflection of the actual mean. According to this table the standard error for ROA is less when compare with the mean with the amount of 0.023. This indicates that the sample mean is accurate and its kurtosis is 7.436. The distribution of ROA is positively skewed with a value of 0.017.

Table 1: Descriptive Statistics Table

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
ROA	125	-0.014	0.119	0.023	0.002	0.017	1.794	7.436	0.43
CPI	125	0.004	1.429	0.085	0.012	0.138	7.903	74.448	0.43
CR	125	0.206	42.02	1.507	0.364	4.073	8.653	82.059	0.43
TDR	125	0.021	0.854	0.634	0.015	0.172	-1.543	2.221	0.43
QR	125	0.052	42.13	1.442	0.364	4.071	8.722	83.399	0.43
Valid N	125								

Source: SPSS Output

The current ratio has 1.507 averages with a minimum of 0.206 and maximum of 42.02 and SD of 0.364 and also the distribution skewed positively and it is 4.073 while The kurtosis is 82.059.Total Deposit Ratio, the minimum and maximum values of TDR are 0.021 and 0.854 respectively. The mean and standard deviation are 0.634 and 0.015 respectively. The distribution skewed positively and it is 0.172 .The kurtosis is 2.221.The minimum and maximum values of Cash Position Indicator are 0.004 and 1.429 respectively. Its mean value is 0.085 and the standard deviation is 0.012 and distributions positively skewed with a value of0.138. The kurtosis is74.448.Quick Ratio has an average of 1.442 with a minimum and maximum of 0.052 and 42.13 with a SD of 0.364 and the distribution of QR is positively skewed with a value of 4.071. The kurtosis is 83.399.

Table 2: Correlation

	ROA	CPI	CR	TDR	QR
ROA	1	-0.135	0.005	-0.526	0.005
CPI	-0.135	1	0.007	0.116	0.01
CR	0.005	0.007	1	-0.222	0.999
TDR	-0.526	0.116	-0.223	1	-0.215
QR	0.005	0.010	0.200	-0.215	1.0

Correlation is significant at the 0.01 level (2-tailed)
Correlation is significant at the 0.05 level (2-tailed).
Source : SPSS output

The table 2 shows the Correlation Coefficient among selected variables which have independent and dependent variables. The table 2 indicates the relationship between the various independent and dependent variables used in the study. As it is observed in the table, the correlation values were found to be mixed (both positive and negative) between the variables. The R values were found to be positive between return on assets and liquidity variables as measured by current ratio(CR) and quick ratio(QR),consisting the correlation values of 0.005 & 0.005 respectively. Similarly return on assets (ROA) is positively correlated with CR and QR but weak correlation. The R values were found to be negative between return on assets and liquidity variables as measured by CPI and TDR, consisting the correlation values of -0.135 and-0.526 respectively.

In this table 3Durbin Watson test also carried out to check the auto correlation among the independent variables. The Durbin Watson statistic is 1.989. This value means that there is no auto correlation in the data. Regression result reveal thatR shows the value of correlation 0.547 hence it can be concluded that there is moderate positive correlation between specific independent variables and ROA. Column R square – this represents the amount of variance in the DV or outcome variable that the model explains. In our research, then QR,CPI,TDR and CR can explain 0.3 or 3% of the variance in ROA, but remaining 97% in ROA can be explained by other factors. The value of the adjusted R square is 0.276 implying that 2.76% of the variance in ROA is explained by the selected independent variables and remaining 97.24% of the variance in ROA is explained by other factors.

Table 3: Coefficient and Regression Analysis Based on Return on Asset (ROA)

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig**
			Std. Error	**Beta**		
1	(Constant)	0.0594	0.005		11.113	0.000
	CPI	-0.0092	0.009	-0.075	-0.968	0.335
	CR	-0.0069	0.007	-1.640	-1.000	0.319
	TDR	-0.0547	0.008	-0.553	-6.943	0.000
	QR	0.0064	0.007	1.525	0.931	0.354
	R	0.547				
	F	12.832				0.000
N = 125			Durbin-Watson =1.989			

Source: SPSS Output
Dependent Variable:ROA

According to the model created by the researcher, this table shows the results of a statistical process which has tested the null hypothesis. Sum of squares of 0.01082 is fitted to the least square line. Simply this indicates from the Regression sum of squares and it represents how much variation is accounted for by the regression model. And according to the model, 0.02529 is unaccounted for the regression model which is indicated by the residual sum of squares. The F value is very important, because the large value of F is to be considered as good. The F value is derived by dividing the regression mean square by residual mean square. In this model the value of F is 12.832. F and significant values are 12.832 and 0.000 respectively. it reflects that the F value is significant at 0.05 levels. Therefore at 5% significance level, it can be statistically concluded that there is evidence that at least one selected independent variable impact on profitability.

According to the coefficient related with the model the final output of the research can be established and it can be highlighted through the regression equation as follows.

$$\mathbf{ROAit= 0.0594-0.0092CPI_{it}- 0.0069CRit -0.0547TDRit +0.0064\ QRit+}\ e$$

Based on the regression equation, when other factors are zero, then value of, ROA will be 0.0594.when increases in the CPI by 1,the ROA decreases by 0.0092.If the CR increases by 1, the ROA decreases by 0.0069 and when the TDR increases by 1,the ROA decreases by 0.0547. Also, increases in QR proportionally increase the ROA by 0.0064.

Overall estimation results shows below the table from linear regression analysis ROA is significantly affected by only TDR but ROA is not affected by CPI, CR, TDR and QR. According to this first model analysis the result has been come that ROA is affected by only TDR because p-value is less than 5% of TDR. So in TDR affects on ROA other three ratios CPI, CR and QR don't affect according to analysis of Sri Lankan Banks, Finance and Insurance Companies.Therefore value is 0.0954 that is the constant value and independent variable TDR's value is -0.054 that means that ROA is directly affected by -0.054 because p-value is 0.000 and R square value came out of 0.276.

Conclusion and Recommendation

The aim of this study is to examine the impact of liquidity on profitability in the selected Banks, Finance & Insurance Companies listed on the Colombo Stock Exchange CSE for a five year period from 2011 to 2015.In this research secondary data are used for the analysis, which is obtained through various sources. The cash position indicator has weak negative relationship with ROA. A cash position indicator appears to have statistically insignificant impact on ROA. The finding states that the companies are not dependent on cash position indicator to determine ROA which means eventhough there is influential but not significant. Current ratio has weak positive correlation with return on assets. Current ratio appears to have a statistically insignificant impact on ROA. This positive relationship consistent with those Thuraisingam(2015),Saleem (2011) and Akter and Mahmud (2014) reported a positive relationship between current ratio and return on assets.vThe finding states that companies are not dependent on current ratio to determine ROA which means although there is influence but not significant.

There is a negative relationship between return on assets and total deposit ratio at moderate level.And also negative relationship of the total deposit ratio on return on assets confirmed by Shahchera(2012).Total Deposit Ratio appears to have statistically significant impact on ROA.The findings state that companies are dependent on total deposit ratio to determine ROA.

Quick ratio has a positive association with ROA.It found that the Quick Ratio has not significantly impact on return on asset.This result is consistent with similar findings, previous researchers of Alshatti (2015), Thuraisingam(2015) and Saleem(2011).The finding states that the companies are not dependent on Quick Ratio to determine ROA which means eventhough there is influential but not significant. The regression results of the study demonstrate that liquidity impact 54.7% on profitability based on return on assets.

The study suggestions are recommended to increase the Bank, finance and insurance companies' Profitability based on liquidity maintenance.Consider the capital stature of the Banks,finance and insurance companies because, this is one of the major factors of determination of its' Profitability. Identifying weaknesses of investment such as loan, pawning, Treasury billand Treasury bondsmay be best one to improve thefinance and insurance companies' profitability because it indicates the area whichdecision should be taken. Financial entities should not pursue extreme liquidity policies at the expense of their profitability, i.e. they should strike a balance between the two performance indicators of Liquidity and profitability.

Banks should engage competent and qualified personnel in order to ensure that the right decisions are adopted, especially with the optimal level of liquidity and still maximize profit. Motivating the depositor to help to achieve the highest level of Political changes is very important factor in the economic. It is also determined the Bank, finance and insurance companies' ProfitabilityTherefore, political should possible to increase the performance of the Banks, finance and insurance Sectors.Inflation and exchange rate also affect the finance and insurance companies' Profitability. So, the government should consider the economic growth to control the inflation.This study can be further developed using the data for more time period and then can have a better conclusion and findingof the profitability.

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