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LIQUIDITY AS A DETERMINANT OF COMMERCIAL BANKS' FINANCIAL PERFORMANCE IN KENYA

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Abstract

Liquid assets are less profitable as compared to long term assets. The dilemma to a finance manager is whether to invest in more profitable long term assets and risk low liquidity or invest in short term assets which are less profitable and therefore reduce return on investment made. The population of the study comprised of all 43 commercial banks in Kenya operating in the years 2012 to 2016. The period of study was considered appropriate because it is most current and data obtained from financial statements was relevant for purposes of the study, in addition given that banking business is affected by macro-economic factors, it was paramount that a shorter period of study be considered to minimize the effects of changes in the macroeconomic environment. For a bank to qualify it needed to have been in operation during the whole period of the study and therefore institutions that merged or were not in operation in the whole period of study were eliminated. The study involved secondary data collection of the Return on assets to measure profitability, Cash and cash equivalent to measure liquidity, Capital ratio and Deposit ratio as financial performance determinants during a specific year. The study used secondary data obtained from audited financial statements of the banks at the end of the years of study. The study used descriptive statistics and regression analysis. The response rate was 82% that is a total 32 out of 39 banks. The study found out that there is a negative relationship between financial performance and liquidity management of commercial banks in Kenya. Liquidity

management is found to be one of the determinants of financial performance of commercial banks in Kenya over the years of study. The study recommends that the finance managers of commercial banks maintain a balance between the level of liquid assets and long term assets to reinforce each of the conflicting objectives of maintaining adequate liquidity and sustainable profitability. Additionally the liquidity requirements that have been set by CBK need to be maintained and strengthened since liquidity is found to have a positive effect on financial performance of commercial banks stability and growth of the entire financial sector.

Keywords: Cash and cash equivalent, Capital Ratio, Deposit Ratio, Liquidity, Financial performance

INTRODUCTION

Liquidity is a factor that determines bank performance; it refers to the ability of the bank to fulfil its obligations, mainly of depositors. Berk (2009) opines that adequate level of liquidity is positively related with bank profitability. The most common financial ratios that reflect the Liquidity position of a bank according to the above author is customer deposit to total asset and total loan to customer deposits. Other scholars use different financial ratios to measure liquidity. For instance cash to deposit ratio to measure the liquidity level of banks in Malaysia. However, the study conducted in China and Malaysia found that liquidity level of banks has no relationship with the performances of banks (Sufian, 2009).

Bank Liquidity simply means the ability of the bank to maintain sufficient funds to pay for its maturing obligations. It is the bank's ability to immediately meet cash, cheques, other withdrawals obligations and legitimate new loan demand while abiding by existing reserve requirements. Nwaezeaku (2008) defined liquidity as the degree of convertibility to cash or the ease with which any asset can be converted to cash sold at a fair market price.

Liquidity management therefore involves the strategic supply or withdrawal from the market of circulation of the amount of liquidity consistent with desired levels of short-term reserve money without distorting the profit making ability and operations of the bank. It relies on the daily assessment of the liquidity conditions in the banking system, so as to determine its liquidity needs and thus the volume of liquidity to allot or withdraw from the market. The liquidity needs of the banking system are usually defined by the sum of reserve requirements imposed on banks by a monetary authority (CBK, 2012).

Liquidity management is a concept that is receiving serious attention all over the world especially with the current financial situations and the state of the world economy. The concern

of business owners and managers all over the world is to devise a strategy of managing their day to day operations in order to meet their obligations as they fall due and increase profitability and shareholder's wealth (Don, 2009). Liquidity management, in most cases, are considered from the perspective of working capital management as most of the indices used for measuring corporate liquidity are a function of the components of working capital.

The importance of liquidity management as it affects corporate profitability in today's business cannot be over emphasized. The crucial part in managing working capital requires maintaining its liquidity in day-to-day operation to ensure its smooth running and meet its obligations (Eljelly, 2004). Liquidity plays a significant role in the successful functioning of a business firm.

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 business (Gapenski, 2010). Dilemma in liquidity management is to achieve desired tradeoff between liquidity and profitability (Raheman, 2007). Liquidity requirement of a firm depends on the peculiar nature of the firm and there is no specific rule on determining the optimal level of liquidity that a firm can maintain in order to ensure positive impact on its profitability.

Liquidity Management

Business financing, especially at 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 (Bashir, 2006). These situations compel business managers to device various strategies of managing internally generated revenue to enhance their chances of making profit and meeting existing shareholders expectations.

Liquidity is a precondition to ensure that firms are able to meet its short-term obligations. The liquidity position in a company is measured based on the 'current ratio' and the 'quick ratio'. The current ratio establishes the relationship between current assets and current liabilities. Normally, a high current ratio is considered to be an indicator of the firm's ability to promptly meet its short term liabilities (Berk, 2009). The quick ratio establishes a relationship between quick or liquid assets and current liabilities. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of value. Low liquidity leads to the inability of a company to pay its creditors on time or honour its maturing obligations to suppliers of credit, services and goods. This could result in losses on account of non-availability of supplies and

lead to possible insolvency. Also, the inability to meet the short term liabilities could affect the company's operations and in many cases it may affect its reputation as well (Chakraborty, 2008).

Inadequate cash or liquid assets on hand may force a company to miss the incentives given by the suppliers of credit, services, and goods as well. Loss of such incentives may result in higher cost of goods which in turn affects the profitability of the business (Deloof, 2003). Every stakeholder has interest in the liquidity position of a company. Suppliers of goods will check the liquidity of the company before selling goods on credit. Employees should also be concerned about the company's liquidity to know whether the company can meet its employee related obligations, i.e., salary, pension, provident fund, etc. Thus, a company needs to maintain adequate liquidity (Farris, 2002).

LITERATURE REVIEW

This study is grounded by the Shift ability theory which 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. This point of view contends that a bank's liquidity could be enhanced if it always has assets to sell and provided the Central Bank and the discount Market stands ready to purchase the asset offered for discount. Thus this theory recognizes and contends that shift ability, marketability or transferability of a bank's assets is a basis for ensuring liquidity.

The theory further contends that highly marketable security held by a bank is an excellent source of liquidity. In addition Liquidity management theory according to Dodds (1982) consists of the activities involved in obtaining funds from depositors and other creditors and determining the appropriate mix of funds for a particularly bank. Liquidity theory has been subjected to critical review by various authors. The general consensus is that during the period of distress, a bank may find it difficult to obtain the desired liquidity since the confidence of the market may have seriously affected and credit worthiness would invariably be lacking. However, for a healthy bank, the liabilities constitute an important source of liquidity.

According to Husni (2011) the determinants of banks profitability normally consisting of factors that are within the control of commercial banks. They are the factors which affect the revenue and the cost of the banks. Some studies classified them into two categories namely the financial statement variables and non-financial variables. The financial statement variables include factors that are directly related to the bank's balance sheet and income statement. While, the non-financial statement variables include factors like the number of branches of a particular bank, location and size of the bank.

Income

Rasiah (2010) presented that banks generate income mostly on their assets and the assets could be termed as income and non-income generating. With regards to commercial banks income (Rasiah,2010) classified it into two, namely interest and non-interest income. The interest income consist of rates charge on loans, overdraft and trade finance which the banks offer to customers. Whereas, the non-interest income consists of fees, commissions, brokerage charges and returns on investments in subsidiaries and securities. According to Vong et al (2009), the major source of banks revenue is interest income. It contributes about 80% of commercial banks earnings. The other source of banks revenue includes dividends and gains from dealing in the securities market. There could be also some minor sources of income for instance earnings from trust activities and service charges on deposit accounts; (Vong et al, 2009).

Capital Ratio

Sufian et al (2008) included capital ratio as a variable in their study of determinants of banks profitability and performance because capital also serve as a source of funds along with deposits and borrowings. They argue that capital structure which includes shareholders' funds, reserves and retained profit affect the profitability of commercial banks because of its effect on leverage and risk. They documented that, commercial banks assets could also financed by either capital or debt. But debt financing could be very risky as compared to capital financing with regards to credits and liquidity risks with which commercial banks are exposed to. This is because for instance, if a commercial bank experiences loss of profit as result of credit default or liquidity problem the bank still has the obligation to service its debt, on the other hand a commercial bank with enough capital is able take higher risk and also absorb shocks which emanate from liquidity and credits risks.

Sufian et al (2008) argued that banks in developing countries needs a strong capital structure, because it provides them strength to withstand financial crises and offers depositors a better safety net in times of bankruptcy and distressed macroeconomic conditions. And according to Molyneux (1992) banks with high level of equity can reduce their cost of capital and that could impact positively on profitability. In addition, Both Basel II and III accord admits that most frequent bank insolvencies are mostly caused by credit losses and for this reason it is prudent for commercial banks to have higher quality of capital in order to be able to absorb more loss hence to better withstand stress periods; (Basel Committee's response to the Financial Crises, 2010). Berger (1995) also asserted that lower level of capital put the banks into risky position and impact negatively the bank's profitability (Berger, 1995).

The argument presented above has made commercial bank of Kenya to continue increasing regulatory capital requirement in the banking industry which is very appropriate because having the strong capital structure would enable them to reduce cost of capital and withstand financial crises hence continue experiencing increases in financial performance.

Liquidity Ratio

According to Devinaga Rasiah (2010) commercial banks are required by regulators to hold a certain level of liquid assets. And the reason behind this regulation is to make sure that the commercial banks always have enough liquidity in order to be able to deal with bank runs. He further argue that a bank assumes the status of highly liquid only if it has been able to accumulate enough cash and have in possession other liquid assets as well as having the ability to raise funds quickly from other sources to be able to meet its payments obligation and other financial commitments on time. He claims that for instance, in a situation where a commercial bank is faced with the problems of bank runs, the bank may encounter liquidity problem. In such a situation the bank might be compelled to raise additional liquid funds by borrowings or selling off some of their liquid assets. In addition, the situation where by the bank rushes to sell off the liquid assets creates an impression in the minds of investors that the bank is trying to dispose of bad assets and for this reason these liquid assets normally attracts lower prices from investors and as a result there could be loss of income from the sale of liquid assets.

Deposits

Banks are said to be heavily dependent on the funds mainly provided by the public as deposits to finance the loans being offered to the customers. There is a general notion that deposits are the cheapest sources of funds for banks and so to this extent deposits have positive impact on banks profitability if the demand for bank loans is very high. That is, the more deposits commercial bank is able accumulate the greater is its capacity to offer more loans and make profits, (Devinaga, 2010).

However, one should be aware that if banks loans are not high in demand, having more deposits could decrease earnings and may result in low profits for the banks. This is because deposits like Fixed, Time or Term deposits attract high interest from the banks to the depositors,(Devinaga, 2010). Investigation done by Husni (2011) on the determinants commercial banks performance in Jordan disclosed that there is significant positive relationship between ROA and total liability to total assets.

METHODOLOGY

This study adopted an explanatory research design involving cross-sectional approach, documentary analysis and literature review to structure the research. Explanatory research seeks to establish causal relationship between variables (Saunders, Lewis & Thornhill, 2009). The research was carried out by means of structured document review and blended with primary data to include information that might not be found in financial statements. This involved a panelled data design with static effects in order to capture both the spatial and temporal effects. The use of panel data with static effects has been used by Trujillo & Ponce, (2013). The population of the study comprised of all 43 commercial banks in Kenya operating in the years 2012 to 2016. The period of study was considered appropriate because it is most current and data obtained from financial statements was relevant for purposes of the study, in addition given that banking business is affected by macro-economic environment, it was paramount that a shorter period of study be considered to minimize the effects of changes in the macroeconomic factors. In order to conduct an in-depth investigation, the study adopted a mixed methods approach. Mixed method approach focuses on collecting, analysing and mixing both quantitative and qualitative data in a single study or series of studies.

The study exploited the use of ratios as a measure of bank performance and liquidity since it is a verifiable means for gauging the firms' level of activities. The surrogate employed in the model specified below is based on standard measures stipulated by the CBK as well as the availability of data. While the return on asset (ROA) was used as a proxy for firm performance, the surrogate used for liquidity comprise the current assets to current liabilities (CAL) ratio.

Using the statistical packages for social scientist (SPSS 21) software, the relationship among the specified variables had been examined through the use of regression and correlation matrix while the Ordinary Least Square (OLS) regression model is represented as:

$ROA = \beta_0 + \beta_1 CAL_{it} + \varepsilon$

Where,

ROA = Return on Assets of Banks (Earnings before Tax/Total Asset)

CAL = current assets to current liabilities ratio (current assets / current liabilities)

Hypotheses

H_0- There is no relationship between banks liquidity and its financial performance.

RESULTS AND DISCUSSION

Bank liquidity refers to the ability of the bank to ensure the availability of funds to meet financial commitments or maturing obligations at a reasonable price at all times. Thus, the Basel Committee advocated for the active management of liquidity risk, in that banks must balance out

requirements to hold a considerable amount of liquid assets while at the same time sustain profitability (Marozva, 2015).

Liquidity was conceptualized as the ratio of total assets to current liabilities. It is the ratio which informs whether the bank is facing challenges in assessing liquid assets which can be converted into readily available assets. Thus, liquidity problems may affect a bank's earnings and capital and in extreme circumstances may result in the collapse of an otherwise solvent bank (Arif & Nauman, 2012).

Table 1. Financial Liquidity Statistics

Variable	2012	2013	2014	2015	2016	Average
Mean	1.2169	1.4718	1.2092	1.2192	1.2424	1.2741
SD	0.1730	1.6426	0.1412	0.1151	0.1111	0.3477
Max	1.7037	1.5612	1.8358	1.4591	1.5041	3.2578
Min	0.8963	0.8836	0.8795	0.8642	0.8494	0.8746

The statistics in table 1 shows that the commercial banks in Kenya generally hold liquid asset in excess of liabilities.

Table 2. The Effect of liquidity on Performance of commercial banks

ANOVA statistics					
Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Regression	15.5095041	1	15.5095041	F(1, 98) = 0.18	0.6739
Residual	8534.88687	98	87.0906824		
Total	8550.39638	99	86.3676402		
R-squared = 0.0018	Adj R-squared = -0.0084		Root MSE= 9.3322		

Coefficient estimates							
ROE	**Unstd. Coefficient**	**Std. beta**	Std. Err.	T	P>t	[95% Conf. Interval]	
Constant	10.37086	3.362073		3.08	0.003	3.69893	17.04278
Liquidity	1.080389	2.560161	.0425898	0.42	0.674	-4.00017	6.160945

Table 2 shows that the statistic, F (1, 98) = 0.18, $p > 0.05$, indicating that the regression model is statistically insignificant in predicting the dependent variable. Therefore, liquidity does explain the variations in performance of commercial banks. Since the p – values < 0.05 indicates that all the coefficients are insignificant.

Test of Hypothesis

The study sought to establish the effect of liquidity on the performance of commercial banks in Kenya and tested the H_O: Liquidity has no significant effect on financial performance of Commercial Banks.

The results in 2 show that the regression model, F (1. 98) = 0.18, p >0.05, was not statistically significant in predicting the dependent variable, thus firm's performance cannot be explained by the liquidity of the commercial banks. The results show that liquidity does not have an effect on the financial performance of the commercial banks in Kenya.

The study findings therefore fails to reject the null hypothesis that liquidity has no significant effect on financial performance of Commercial Banks and concludes that liquidity does not have statistically significant effect on the performance of commercial banks in Kenya. The results indicate that liquidity does not have an effect on the performance of the commercial banks in Kenya. This would suggest that liquidity is not a determinant of performance in commercial banks in Kenya, and this assertion finds support from a study of Malaysian banking industry which affirmed that liquidity does not contribute to profitability (Said & Tumin, 2011).

Other indications from developed country context affirmed that liquidity negatively relates to firm performance of European domestic banks while positively correlates to firm performance of foreign banks domiciled in Europe (Pasiouras & Kosmidou, 2007).Several studies affirm that it is in fact the liquidity risk that determines the profitability of a commercial bank. Empirical evidence by Marozva, (2015); Arif & Nauman, (2012); Shen *et al.,* (2009) affirmed that liquidity risk negatively links and relates to banks financial measures of ROA and ROE. Other findings, indicate that liquidity positively affects bank profitability in Tanzania banking industry (Qin & Dickson, 2012), however, a study by Francis, (2013) on commercial banks in Sub – Saharan Africa refuted the assertion and affirmed that liquidity has a negative effect on bank profitability. These findings can be seen to lead to assertion that banks absorbing a lower level of risks perform better, but the variations in bank profitability are largely attributable to variations in credit risk, since increased exposure to credit risk is normally associated with decreased firm profitability (Athanasoglou, Delis & Staikouras, 2006).

CONCLUSIONS AND RECOMMENDATIONS

As indicated by the respondents, most banks have sufficient liquidity and thus they are able to settle their liabilities when due and have set up institutional mechanisms and measures to manage liquidity. This is so because banks have to balance out the demands of high and low levels of liquidity because liquidity significantly affects banks operations and consequently affect its profitability.

Liquidity has no significant effect on bank (β_1= 2.560161, t = 0.42, p> 0.05) indicating that liquidity does not determine the bank profitability of commercial banks in Kenya, however, higher liquidity ratio could influence bank profitability in sub Saharan Africa (Munyambonera, 2013). The problem of liquidity is the demands of holding significant amounts of liquid assets for operations which therefore reduces the amounts of assets that can be used to generate profits for the organization.

The data analysis results in chapter four indicate that liquidity is not one of the determinants of performance of commercial banks however the relationship between ROA and Cash and cash equivalents, Capital ratio and Deposit ratio is positive implying that an increase in liquidity will lead to an increase in profitability of commercial bank. Considering the findings of this study, the following conclusions can be drawn:

For the success of operations and survival, commercial banks should not compromise efficient and effective liquidity management. They are expected to maintain optimal liquidity level in order to satisfy their financial obligations to customers or depositors and maximize profits for the shareholders.

The optimal liquidity level is reached if the commercial banks religiously maintained the minimum liquidity requirement as stated by the Central Bank of Kenya. This attempt helps to reduce cases of bank distress.

From the study, we can rightly conclude that both illiquidity and excess liquidity are financial diseases that can easily erode the profit base of a bank as they affect bank's attempt to attain high profitability-level. The pursuit of high profit without consideration to the liquidity level can cause great illiquidity, which reduces the customers' patronage and loyalty. Therefore, any bank that has the aim of maximizing its profit level must adopt effective liquidity management.

The scope of this research was limited to the evaluation of performance of 43 commercial banks in Kenya. However, this may vary incase other financial institutions like micro finance are included and more countries are considered so as to increase the population. Therefore, in furtherance of the research, one might want to consider expanding the scope to include all financial institutions and improve results of the research. Furthermore the study sought to investigate the determinants of financial performance of commercial banks in Kenya using liquidity as the only variable, however this is not exhaustive. Future research could incorporate all macroeconomic variables such interest rates fluctuations, inflation and exchange rates.

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