THE EFFECT OF LIQUIDITY ON LENDING IN COMMERCIAL BANK IN KENYA

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Abstract: *Lending is a major service rendered by banks which contribute immensely to their revenue generation. Usually banks consider a number of factors in determining lending which relates to the sector of economy to lend to, the type of clients to take risks on and the amount to be extended. In a case where a bank grants credit facility in disregard to its liquidity position, then it may run into trouble in meeting its customer's cash drawings on demand. Poor loan service will impact negatively to its profitability and consequently the level of its liquidity. The objective of this research was to ascertain the effect of liquidity on lending of commercial bank in Kenya. The study was guided by loan pricing theory. The research design adopted was descriptive correlation research were population of interest for the study comprised of the 44 commercial banks. The study used a secondary data collection sheet and documentary checklists to collect data. The data collected was analyzed using descriptive statistics. The study used panel regression model of analysis. This study found that liquidity affected lending of commercial banks positively.*

Keywords*: Liquidity, Lending Decision, Information Asymmetry, Financial Institution*

1.0 INTRODUCTION

From the ancient times, since the discovery of money, there have always been those who possess surplus funds which they may not need for their immediate use, referred to as surplus economic units and those who lack cash to finance their current needs (Olusanya et al., 2012). Those with the excess money started extending credit to finance the needs of those with cash shortage for a consideration leading to the evolution of credit (Olokoyo, 2011). The system was characterized by direct lending where the players were to directly engage with each other. It involved the surplus units (lenders) and the deficit units (borrowers) directly search out themselves and dealing directly, thus the lender taking all the risk by himself (McKinnon, 2005). Lending is therefore a major driver in aiding the economic activities of households, firms and governments which in turn influences the growth and development of any nation's economy. Lending activities of banks influences the growth of an economy through provision of resources for investments, (McKinnon, 2005).

It is a common knowledge that deposits or cash received from depositors is the major source of lending but the total amount lent out is usually a fraction of the aggregated deposits and the balance is usually held in reserve to maintain the liquidity position of the bank. Credit creation is usually the main primary business for majority of banks. It can be deduced that loan portfolio constitutes the largest portion of financial assets and revenue stream for banks (Comptroller, 1998). Banks usually factor in very many elements in the process of determining the likelihood of a potential borrower honoring his loan obligations when making a credit decision

which includes the ability and willingness to repay the extended facility. The key elements that banks consider are the borrower risk profile and client-bank relationship. The most important element is the risk factor in that even if an individual has good and long term relationship with the bank and is willing to repay back the loan sought but lacks the ability, it was impossible for the bank to get back their principal and the interest levied as they fall due. The banks should therefore carefully evaluate the risk profile of the borrower, which is basically the ability to meet future loan repayments when they fall due, in their credit extension decisions

Banks usually consider a number of factors in determining the lending decision which relates to the sector of economy to lend to, the type of clients to take risks on and the amount to be extended. These factors revolve around interest rates, liquidity, asset quality and capital adequacy (Olusanya et al., 2012).

According to Cumming and Nel (2005), while studying lending behaviour using trend analysis in South Africa found out that the 1988 Basel Accord implementation led to increased capital adequacy ratio meaning additional capital was injected to address the implementation of the new accord. This had an impact of decreasing banks' lending, thus leading to economic contraction. Kishan and Opilela (2010) on the other hand asserted that size of the bank's asset and its capital had an inverse relation to the bank's ability to raise funds and continue growing its loan portfolio during economic contraction period.

The Central Bank of Kenya, which falls under the Ministry of Finance, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. Central Bank of Kenya publishes information on Kenya's commercial banks and non-banking financial institutions, interest rates and other publications and guidelines (CBK, 2011). The Central Bank of Kenya report (2012) reported that the Kenyan banking industry had been steadily registering high Non-Performing Loans (NPLs) in the last three years. The NPLs decreased between 2009 and 2012. It showed that in the period 2009/2010, NPLs reported was Kes 61.5 billion (7.4%). In 2010/2011, NPLs reported was Kes 58.3 billion (5.4%). In 2011/2012, the NPLs reported was Kes 57.5 billion (4.5%). The figures released still remain high despite there being a decline in NPLs.

Commercial banks are custodians of depositor's funds and operate by receiving cash deposits from the general public and loaning them out to the needy at statutorily allowed interest rates. Loans are based on the credit policy of the bank that is tightly coupled with the central bank interest rate policy. These in effect determine the level of financial risk in a particular bank (CBK, 2010).

2.0 STATEMENT OF THE PROBLEM

The banking industry in developing countries such as Africa and Kenya in particular forms a strategic hub of the financial system. The existing literature does not provide adequate empirical evidence on the lending of banks in developing economies like Kenya. Despite having witnessed an impressive profitability era, which was characterized by stiff competition, massive deposits and wide investment opportunities by Kenyan commercial, it has been noted that some banks tend to ignore the reality that their administration should be anchored on specialized skills and dexterity on the part of their management. In a case where a bank grants credit facility in disregard to its liquidity position, then it may run into trouble in meeting its customer's cash drawings on demand. Poor loan service will impact negatively to its profitability and consequently the level of its liquidity. The study therefore sought to determine the effect of liquidity on lending in commercial banks in Kenya by investigating the extent to which liquidity ratio determine total lending.

3.0 LITERATURE REVIEW

This study was based on the loan pricing theory which is based on the premise that it's not practical for banks to always offer very low interest on deposits but at the same time offering high interest on loans so to maximize on their revenues. Banks ought to consider the problem of moral hazard and adverse selection in their attempt to maximize on revenue since it's hard to focus borrower type with certainty at the time of initiating client relationship (Stiglitz and Weiss, 1981). High interest rate might trigger adverse selection problem since the high rates was mostly acceptable to the high risk borrowers. Once these categories of borrowers receive the loans, it's highly likely that they may develop moral hazard behaviour as a result of venturing into high risky projects and investments (Chodechai, 2014). According to Stiglitz and Weiss (2001), it's a common occurrence in most cases where the interest rate charged by banks does not mirror the risk profile of the borrowers. The present study about loans and lending and consequently the present theory is appropriate considering the tactical pricing banks engage in in their loaning processes.

3.1 Liquidity

Liquidity refers to a bank's ability to honor its financial obligations, mainly to depositors, whenever they are in need of their deposits. Comptroller's Handbook (1998), recognizes lending as the main business activity for the majority of commercial banks. The largest asset in a bank's balance sheet is probably loan portfolio which contributes heavily to a bank's revenue. This makes it to be the largest source of commercial banks' risk to its safety and sound position. Pilbeam (2005) postulates that the liquidity level held by banks relies to a great extent on demand for loan which forms the foundation for growth in loans. A lower demand for credit facilities leads the commercial banks to keep more of short term assets, whereas a higher loan demand triggers holding of less liquid assets which is informed by the high profits associated with the long term loans. Thus, loans and advances posit an inverse relationship with the banks liquidity.

Dang (2011) argues that liquidity is positively related with the profitability of a bank. According to Dang, the liquidity position of a bank is majorly measured by two ratios; a ratio of customer deposit to total asset and a ratio of total loans to customer deposits. Other researchers measure liquidity by using different financial ratios. For example, Ilhomovich (2009) applied cash to deposit ratio in measuring the level of liquidity for banks in Malaysia. On the other hand, the studies which were carried out in both China and Malaysia did not find relationship between liquidity level and the banks performances (Said and Tumin, 2011).

Ituwe (1983) opines that the availability of cash in a bank's vault dictates a bank's capacity to extend credit facilities. This is informed by the fact that the bank should be able to pay the client money on demand, which is done in two ways, either through cash withdrawal or banks' accounts, which is basically use of cheques. Banks are therefore required to keep sensible amount of cash to cover their clients' demand. Goldfeld and Chandler (1980) asserted that liquidity is paid much more attention by banks than the other types of financial institutions e.g. insurance companies dealing in life policies. It should be noted that banks meet their payment obligations largely from the current receipts of liabilities from its normal business course.

Kothari (2010) opines that liquidity ratios of any business outfit demonstrate their financial sound position. It shows the capability of an enterprise to meet its maturing obligations. A firm's solvency position is reflected through these ratios. There are three types of liquidity: First is the Current Ratio which measures the relationship between the current assets and the current liabilities. It shows whether an institution has instant ability to pay off the current liabilities as they mature and whether it can face unforeseen reverse by the strength of its liquid position. Secondly, We have Quick Ratio or Liquid Ratio; which measures the correlation between quick assets and the current liabilities, where Quick Assets = (Current Assets – Closing Stock). Lastly, Acid-

Test Ratio, which measures the relationship between very quick assets and current liabilities. Very quick assets = (Current Assets – Closing Stock and Debtors).

Back in Kenya, according to CBK (2011), liquidity is determined as a ratio of a bank's net liquid assets to its net deposits and short term liabilities. This shows ability of an institution to honor its maturing obligations. The banking sector continued to register a strong liquidity position. A strong liquidity position in economy is a demonstration of the sector's liking for liquid assets which are generally government related financial securities which are risk free in nature. The regulator (CBK) has set a minimum requirement of 20 per cent to be maintained by the commercial banks in Kenya.

3.2 Commercial Bank Lending

Banks are in a better position to estimate the probable performance of proposed projects financing due to the fact that they may draw experience from similar past ventures that they have financed. They are usually in a position to obtain valuable data that may not readily be obtained by entrepreneurs. They also expected to be familiar with the economic dynamics of their geographical scope and the common economic trends. This explains the role of banks in the business of project-evaluation (Manove, Padilla and Pagano, 2010). At the same time, they need to balance between revenue generation and the associated risk emanating from their lending activities. Banks should carefully evaluate their potential borrowing clients to ensure that they do not extend a lot of loan to highly risky clients who may not honor their loan repayment obligation. This may not be sustainable in the long run since if the borrowers do not pay.

The banks' lending terms may then be motivated by the need to maintain its clients which might present it with opportunity to benefit from other business prospects which may be non-interest bearing revenues such as commissions and fees. Thus, the banks should not overlook the importance of the relationship factors since they may provide inside information which might be beneficial to it in future. It is therefore exciting to observe how banks aggregate the relationship factors into their lending. Boot (2010) while researching on banks from banks based in UK, Germany, USA, and Japan, concluded that transactional banks are less effective than the relationship banks in their lending.

Djiogap and Ngomsi (2012) used a sample of thirty five banks from six African countries to examine factors affecting the banks' long term credit and concluded that the bank's capitalization, availability of long term maturing liabilities, GDP growth and its size affect the ability of commercial banks to extend loans. These results recognized the value of a bank's liquidity position in credit creation. Besides, Chernykh and Theodossiou (2011) postulated that the only determinant of credit creation by banks is its size, which simply refers to the banks capitalization and its assets.

In Kenya, it is evident that Interest Rate, the rate at which a commercial bank lends money to the borrowers, had linear relationship with quantity of loan (Ayieyo, 2015). He further noted that it is evident that Liquidity Ratio was positively associated with quantity of loan.

4.0 RESEARCH METHODOLOGY

The research adopted a descriptive correlation research design. A multiple regression model was used to establish the association between the total loans advanced by commercial banks and all the other variables which were identified as capital adequacy and liquidity ratio.

4.1 Data Analysis and Presentation

The collected data was quantitative in nature. Descriptive statistics was used to quantitatively carry out the analysis. Regression analysis was used as an analysis tool.

The secondary data was collected using the audited financial reports of the three institutions. Bank lending was measured by aggregate of total loans advanced by the banks in each financial year. Liquidity was measured as a ratio of total loans advanced to total assets. This was done on each bank over the period under study and the same amalgamated to get the industry position.

5.0 RESULTS AND DISCUSSION

5.1 Descriptive Analysis

The descriptive statistics of the dependent and independent variables used in the study analyzed the descriptive statistical measures of the data to determine the average figures. Results as presented in table 1 indicated that banks had average liquidity of 0.554.

Table 1. Descriptive analysis

Variables	N	Minimum	Maximum	Mean	Standard Deviation
Liquidity	158	1	5	0.554	0.168

5.2 Statistical Test for Normality

The research tested for the data normality. The suitability of the data for the regression analysis was assessed using normality test and Multicollinearity test, since these are the most important factors to consider in regression analysis.

The normality of the variables used in the model was tested using Kolmogorov-Smirnov and Shapiro-Wilk tests. In both tests, a non-significant result (i.e. significance value greater than 0.05) shows there is normality. The result, as presented in Table 2 shows that the variable is normally distributed, with the exception of asset quality. However, since the number of observation is quite high, the result is good for analysis (Pallant, 2011).

Table 2. Test of Normality among the Variables

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig
Liquidity	0.123	158	0.010	0.910	158	0.100

5.3 Test for Multicollinearity

The assumption of Multicollinearity was tested to ensure that there is no strong relationship among the predictor variables. Tolerance and Variance Inflation Factor (VIF) (Pallant, 2009) was used in addition to Pearson's correlation test. The tolerance test illustrates the degree to which the variability of the specified independent variable has been explained by the other independent variables in the model. From the table4.3

below, it can be observed that tolerance values for all the variables are greater than 0.10, indicating that the regression model does not exhibit any problem with Multicollinearity. Also, the VIF test was conducted to detect the presence of Multicollinearity among the independent variables. According to Pallant (2011), the rule of thumb states that VIF values above 10 suggest some high levels of Multicollinearity. The result shows that none of the values are above 10, suggesting that there is no problem of Multicollinearity in the multiple regression model. In other words, the assumption of Multicollinearity has not been violated, hence the use of the panel multiple regression model.

Table 3. Test for Multicollinearity

	Collinearity Statistics	
	Tolerance	VIF
Liquidity	.670	1.643

5.4 Correlation Analysis

Pearson correlation analysis was conducted to examine the relationship between the variables. The measures were constructed using mean scales from both the independent and dependent variables. According to Cooper and Schindler (2000) the correlation coefficient value *(r)* range from 0.10 to 0.29 is considered weak, from 0.30 to 0.49 is considered medium and from 0.50 to 1.0 is considered strong. However, according to Field (2015), correlation coefficient should not go beyond 0.8, to avoid multicollinearity. Since the highest correlation coefficient is less than 0.8, there is no multicollinearity problem in this research. Liquidity variable had a positive correlation with the dependent variable. Liquidity had a positive correlation of ($r=0.555$ $p< 0.01$).

Table 4. Correlation analysis

		Lending	Liquidity
Lending	Pearson Correlation	1	
	Sig. (2-tailed)		
Liquidity	Pearson Correlation	.555[**]	1
	Sig. (2-tailed)	.000	

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

5.4 Coefficients
Table 5. 4 Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	T	Sig.
(Constant)	2.767	.361	.287	7.668	.000
Liquidity	.385	.078	.393	5.968	.000

a. Dependent Variable: Lending

The t-value of constant produced (t = 7.668) was significant at .000 per cent level (Sig. F< 0.05), thus confirming the fitness of the model. Therefore, there is statistically significant relationship between Liquidity and capital adequacy but not for interest rates and asset quality. The results show that all the variables were

statistically significant because they had a p value less than 5%. Further based on the beta results the study thus interprets the model as:

$Y_0 = 2.767 + 0.385 (X_1) + e$

This implies that for every unit increase in liquidity Lending increases with 0.385 units, for any increase in capital adequacy, Lending increases with 0.168 units.

This study found that liquidity affected lending of commercial banks positively. This indicates that liquidity, has an impact on the credit extension by commercial banks in Kenya.

6.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The main reason for this study was to establish the effect of liquidity on lending in commercial banks in Kenya. The results indicated that there is a positive linear relationship between the lending and liquidity ratio.

6.1 Conclusion

These research findings found out that, there was evidence of a very strong positive relationship between liquidity and the quantity of loan advanced by commercial banks. This indicates that as liquidity rises, the Commercial Bank tendency to extend credit increases. The research findings are therefore in agreement with Amano (2014) who researched on the Ethiopian commercial banks and concluded that the Ethiopian banks' lending was significantly affected by the liquidity position and an adjustment in it would yield a high change in commercial banks' lending volume.

6.2 Recommendations on Practice and policy

Based on the research findings of the study, it is suggested that commercial banks should be more innovative in their lending behaviors in different sectors present different risk profile.

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