CREDIT MANAGEMENT AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN UGANDA

Veridique Musambaghani[1]

1-St Lawrence University, MBA, Finance and accounting,
veridique12@gmail.com

ABSTRACT:

This study examined the relationship between credit management and financial performance of banks in Uganda. The research used secondary data based on banks audited financial statements and Bank of Uganda annual supervision reports for the period under analysis 2012-2017.Universal sampling technique was used as the research was conducted on all 24 commercial banks licensed and operational in Uganda. In analyzing the research hypotheses, the study adopted the use of both descriptive and inferential statistics specifically using regression and ANOVA to establish the significance / fitness of the model and also to establish the link between credit management and financial performance of commercial banks in Uganda.The results indicate that there is a negative relationship between credit management as measured by LR, CAR and NPL/TL ratio with financial performance measured by ROE. This indicates that banks in Uganda can increase their financial performance by reducing their non-performing loans which is heavily correlated to financial performance i.e. increasing the quality of their credit standards.The findings reveal that all *indicators* used in credit management explain up to 41% of variation of the financial performances of banks in Uganda. This suggests that other factors apart from the credit policy, capital adequacy and credit risk control affect the financial performance of Banks in Uganda.

Keywords:Credit Management, Commercial Banks, Performance

1. Introduction

Banks are financial institutions, which play a role of financial intermediation between people in excess of funds and those in need of finances (Oludhe, 2011). Commercial banks are one of the most important parts of any country's economy. They play a vital role in developing economies like Uganda, Nigeria, Ghana, Egypt and Congo. Financial intermediation makes possible the financing

of agricultural, industrial and commercial activities of a country.

Scholtens et al. (2003) define credit management as a process of granting credit, the terms it's granted on and recovering this credit when it's due. This is the function within a bank or company to control credit policies that will improve revenues and reduce credit risks.
Credit risk is the risk of loss due to debtor's non-payment of a loan or other line of credit (either the principal or interestor both). According to Campbell (2007), default rate is the possibility that a borrower will default, by failing to repay principal and interest in a timely manner.

Financial performance is a measure of the change in financial state of an organization or the financial outcomes that results from management decisions and the execution of those decisions by members of the organization (Mburu N., 2015).The financial performance of banks has critical implications for economic growth of countries. Good financial performance rewards the shareholders for their investment. This, in turn, encourages additional investment and brings about economic growth. On the other hand, poor banking performance can lead to banking failure and crisis which have negative repercussions on the economic growth.

In recent times in Uganda, some commercial banks have been wound up failing to meet their short-term obligation. It's for example, the National Bank of Commerce Uganda, (NBCU) which went through a dire financial distress from 2010 to 2012 before being taken over by Crane Bank Uganda (Uganda Radio Network, 2018), the latter faced the same issues before being acquired through liquidation by DFCU Bank in 2016. It is important to note that the major cause of the winding up of these banks is their poor management of their finance and credit. Both were writing off huge amounts of debt yearly and also reflected some going concern issues that related to their management of credit and finance (BOU, 2016). The reason for the failure of these banks has sparked the interest of the researcher in conducting further studies into the management of finance and credit in Commercial banks in Uganda.

The study finds out how various commercial banks credit management indicators affect the financial performance of banks in Uganda. It shows how the inconsistency between what is expected from the banking sector and efforts in place to make sure the channel of funds between people in excess of finance and people in need of finance can lead to banks failures. Therefore, this research had the following general objective: "to analyze the effect of credit management to the financial performance of commercial banks in Uganda". From this main objective, specific goals were elucidated as follows:

1. To determine the relationship between credit policy and financial performance of commercial banks in Uganda
2. To investigate the connection among credit risk control and the financial performance of commercial banks in Uganda
3. To establish the relationship between capital adequacy and financial performance of banks in Uganda

2. Review of Relevant Empirical Studies

Commercial banks face different kinds of risk, including liquidity risk, credit risk, interest rate risk, market risk, foreign exchange risk and political risks (Campbell, 2007). Credit risk management in banks has become more important not only because of the financial crisis that the world has experienced in the past but also with the introduction of Basel (I/II & III). In this research, credit management was proxied using credit policy, credit risk control and capital adequacy.
Credit management processes enforce the banks to establish a clear process in for approving new creditas well as for the extension to existing credit (Sharma, 2019). These processes also follow monitoring with particular care,and other appropriate steps are taken to control or mitigate the risk of connected lending (Basel, 2002);

Pamela (2012) sought to examine to what extent the credit terms and access to credit have affected financial performance in SMEs in Uganda, the results indicated a significant positive association among the variables of credit terms. She concluded that credit terms contribute 33.1% of the variance in financial performance. Arora (2013), in a similar study conducted in India attained to the same conclusion.

Sharma (2019), critically assessed the effects of credit management on banks' performance in Nigeria. Findings from the study revealed that the ratio of non-performing loans and bad debt do have a significant negative effect on the performance of banks in Nigeria. Similarly, Muninarayanappa and Nirmala (2004) in a related study opined that the success of credit risk management require maintenance of proper credit risk environment, credit strategyand policies. Thus the ultimate aim should be to protect and improve the loan quality. In the same vein, Nzioka (2013) attained to same conclusions in a study conducted on 43 commercials banks in Kenya using the ROA as a profitability proxy and total deposits, total loan and total assets as explaining variables.

According to Paul (2002), the inadequacy of minimum capital is a major cause of bank failure in Uganda. Paul's findings were however not so conclusive on whether the new capital requirements played a part in setting off or precipitating the crisis that took place in the late 90s in Uganda.

Using Capital adequacy as one of independent variables, Waithaka (2013), concluded that the compliance with BASEL II accords has improved the Kenyan commercial's bank lending with the overall impact on their performance. In a research done in Tunisia, Ines G. (2016) using GMM dynamic model estimation found that capital adequacy and operational efficiency strongly influences the credit risk in 10 Tunisian commercial Banks with an overall impact on their profitability.

Using World Bank Basel Core Principles for Effective Bank Supervision (BCP) assessments conducted from 1999 to 2010, Ayadiet al. (2015) evaluated how compliance with Basel Core Principles affects bank performance for a sample of 863 publicly listed banks drawn from a broad cross-section of countries. their results indicated that overall BCP compliance, or indeed compliance with any of its individual chapters (Capital adequacy being one of them), has no association with bank efficiency (performance).

3. Development of Hypothesis

Drawing from the literature, the hypotheses to be tested in this study are stated below in their null forms:

H1. There is no significant relationship between the credit policy and the financial performance of commercial Banks in Uganda

H2. There is no a significant influence of the credit risk control on the financial performance of commercial banks in Uganda

H3. There is no significant relationship between capital adequacy ratio and financial soundness of banks in Uganda

4. Methodology

Methodology Description

In achieving the objectives of this study, the research used secondary data based on respective banks audited financial statements and Bank of Uganda annual supervision reports for the period under analysis 2012-2017. Secondary data can be defined as data collected by others, not specifically for research question at hand (Mburu, 2015).

The study covered the period between 2012-2017. This is because during that period the banking industry underwent shockwaves with 2 of its banks facing liquidation. Universal sampling technique was used as the research was conducted on all 24 commercial banks licensed and operational in Uganda. In analyzing the research hypotheses, the study adopted the use of both descriptive and inferential statistics specifically using regression and ANOVA to establish

the significance/ fitness of the model and also to establish the link between credit management and financial performance of commercial banks in Uganda.

5. Presentation and Discussion of findings

Presentation of findings

Summary of descriptive statistics results for all the variables as used in the study is presented in table 1.

Table 1. Summary of statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Lending ratio	24	.44	2.33	.9299	.43578	.190
CAR	24	.12	.38	.2006	.08409	.007
NPL	24	.02	.20	.0603	.03604	.001
ROE	24	-.05	.31	.1335	.09864	.010

Source: Extracted by the researcher from audited financial reports (secondary data)

Results from our descriptive statistics as shown on the table 1. presents an average ROE of 13.35% for all the banks in the industry in the period under study. Correspondingly, the independent variables in this study proxied as (Lending ratio, CAR and NPL/TL) maintains an averaged mean distribution value of about 92.99%, 20% and 6% respectively for the whole banks in the industry. Also, findings from the Pearson correlation analysis as depicted in table 2 indicates that the independent variables (LR, CAR & NPL/TL) have both a negative association (respectively 23.6%,52.5% et 33.8%) with the performance (ROE) of the sampled banks.

Table 2. Correlation coefficient between independent and dependent variables

		Lending ratio	CAR	NPL	ROE
Lending ratio	Pearson Correlation	1	.404	-.177	-.263
	Sig. (2-tailed)		.050	.409	.215
	N	24	24	24	24

CAR	Pearson Correlation	.404	1	-.010	-.525**
	Sig. (2-tailed)	,050		,961	.008
	N	24	24	24	24
NPL	Pearson Correlation	-.177	-.010	1	-.338
	Sig. (2-tailed)	.409	.961		.106
	N	24	24	24	24
ROE	Pearson Correlation	-.263	-.525**	-.338	1
	Sig. (2-tailed)	.215	.008	.106	
	N	24	24	24	24

**. Correlation is significant at the 0.01 level (2-tailed).
Source: Data from analysis of audited financial reports

Table 2 shows the relationship between the dependent and independent variables. As can be seen from the Table capital ratio is negatively related (52.5% with a probability of 0.008) to ROE; this is in line with the conventional argument that higher capital ratios encourage banks to invest in safer assets, such as lower-risk loans or securities, which may affect bank performance (Okoth et al., 2013). Credit risk control which is expressed as non-performing loans to total loans is negatively related (33.8% with a probability of 0.106) to banks performance indicator (ROE). This indicates that poor asset quality or high nonperforming loans to total asset is related to poor bank performance. The other explanatory variable, lending ratio is negatively related (26.3% with a probability of 0.215) to the performance as provided by ROE, but the relationship is very weak.

Table 3. Summary of coefficients 2012-2017

Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.	95,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.334	.059		5.642	.000	.211	.458
	Lending ratio	-.031	.043	-.136	-.712	.485	-.121	.060
	CAR	-.555	.221	-.473	-2.511	.021	-1.016	-.094
	NPL	-1.005	.479	-.367	-2.098	.049	-2.005	-.006

a. Dependent variable ROE
Source: output from SPSS based on data from extracted financial reports of banks

Table 3 above presents the coefficients of the variables, the significance of those coefficients and the standard error term. As per the SPSS generated table 4, the equation, $Y=^{a}+ß_1X_1+ß_2X_2+ß_3X_3 + Ø$ Becomes; $Y=0.334-0.031X_1-0.555X_2-1.005X_3 + 0.059$

The results indicate that there is a negative relationship between credit management as measured by LR, CAR and NPL/TL ratio with financial performance measured by ROE. This indicates that banks in Uganda can increase their financial performance by reducing their non-performing loans which is heavily correlated to performance i.e. increasing the quality of their credit standards.

Moreover, the table depicts that holding the lending ratio, the capital adequacy ratio and the ratio of nonperforming loans to total loans constant, the performance of banks in Uganda will be 0.334. It also shows that a unit decrease in lending ratio will lead to an increase in financial performance by 0.031,a unit decrease in capital adequacy ratio will lead to an increase in financial performance by 0.555 and a unit decrease in the ratio of nonperforming loans to total loans will lead to an increase in financial performance by 1.005.

Table 4. Summary of the regression model

R	R Square	Std. Error of the Estimate	Change Statistics				
			R Square Change	F Change	df1	df2	Sig. F Change
.639a	.408	.08136	.408	4.602	3	20	.013

a. Predictors: (Constant), NPL, CAR, Lending ratio
b. Dependent Variable: ROE
Source: output from SPSS based on data from extracted financial reports of banks

According to the F statistics above the variables used in the model fits well in the model. The model shows that the LR, CAR and NPL/TL ratio combined have a significant relationship (R= 0.639, P=0.013) with performance. It is also shows that they can predict up to 40.8% of the variance in performance.

Discussion of Findings

The study found that that there is a correlation between the observed and predicted values of financial performance. Table 4 shows R-square representing the proportion of the variability in one series that can be explained by the variability of one or more series in a regression model; the regression model for the 6 years studied helped us explain almost half of variations in the financial performance based on credit management components.

The findings are in line with Oludhe (2011), who, in a similar study conducted in Kenya, he argues that credit risk management is related to financial performance as they influence earnings of banks. The study corroborates the findings of Okoth et al. (2013) indicating that there is a relationship between credit management and bank performance. It was established that poor asset quality or high non-performing loans to total asset are related to poor bank performance.

Table 2 shows the correlation matrix of the credit management indicators to financial performance. From table 2, capital adequacy ratio was negatively related to performance in a significant proportion; this is in line with the conventional argument that higher capital ratios encourage banks to invest in safer assets, such as lower-risk loans or securities, which may affect bank performance (Okoth et al. 2013). Credit risk Control (NPL/TL) had a weak relationship between asset quality and financial performance of commercial banks in Uganda, this is in accordance with a study conducted in Kenya by Oludhe, (2011). Credit policy (LR) had also a weak relationship with financial performance.

The objective of the study was to establish the effects of credit management on the financial performance of Banks in Uganda. This was a descriptive and cross-sectional study. It adopted a universal sampling technique were all the commercial banks licensed and operational in Uganda from 2012 was selected (24 banks).

The study used secondary data obtained from the audited financial statements of Banks in Uganda for the years 2012-2017. The variables of interest i.e. Credit Policy (LR), capital adequacy (CAR) and credit risk control were entered into statistical package for social sciences model and analyzed to examine their relationship and hence achieve the research objective.

The coefficients were put into a regression model to determine the relationship between independent and dependent variables in attaining the desired results on the study of interest. It is evident from our statistics that the coefficients of credit management are negative meaning that there is a negative relationship between credit management indicators and the performance. The findings reveal that all indicators used of the credit management explain a mere 41% of variation of the financial performances of banks in Uganda. This suggests that other factors apart from the credit policy, capital adequacy and credit risk control affect the financial performance of Banks in Uganda.

Hypothesis testing

The significance level of the study was 5%, based on the table 4, the null hypothesis was rejected for all credit management indicators having a P-value less than the

chosen significance threshold; this is in accordance with Adeusi et al. (2013) in a similar study done in Nigeria.

H1. The first testable hypothesis in the study was: There is no significant relationship between credit policy and performance of commercial bank. As per findings in the table 4, the credit policy captured by the lending ratio had a p-value equals to 0.485 and far above the proposed significance level (0.05). Thus we accept the Ho, there is no significant relationship between the credit policy and the performance of commercial banks in Uganda.

H2. The second testable hypothesis in the study was: There is no significant relationship between the capital adequacy ratio and the performance of commercial banks. As per findings, CAR had p-value equals to 0.021 and less than the chosen level of significance (0.05). Thus we reject the Ho and accept the alternative one; there is a significant relationship between the CAR and the performance of commercial banks.

H3. The third testable hypothesis in the study was: There is no significant relationship between the credit risk control and performance of commercial banks. We found that the credit risk control captured by the nonperforming loan ratio had a p-value of 0.049 which is less than the level of significance chosen under the study. Thus, we reject the Ho and accept the alternative one. There is a significant relationship between the credit risk control and the performance of commercial banks in Uganda.

When a probability value is below the significance level, the effect is statistically significant and the null hypothesis is rejected, thus the alternative hypothesis is accepted; this is exactly what happened with H2 and H3 when their respective p-value were less that the level of significance chosen under the present study. However, in accepting the alternative hypothesis for H2 and H3, the assurance we have in the two assertions is slightly different 97,1% for H2 and 95,1% for H3, so not all statistically significant effects should be treated the same way. For H1, it was found that there is no significant relationship between the credit policy and the financial performance, as in establishing the relationship the assurance given as per our regression model is 51,5%.

6. Conclusion and Recommendations.

This study examined the relationship between credit management and bank performance in Uganda. Findings from our determination test indicate that about 40% of the variability in banks' performance (measured as ROE) can be explained by the attributes of the credit management.

Empirical evidence from the study indicates that there is a negative relationship between asset quality and financial performance of commercial banks, to be specific, it was found that a unit decrease in the ratio of nonperforming loans

to total loans will lead to an increase in financial performance by 1,005. It also shows that a unit decrease in lending ratio will lead to an increase in financial performance by 0,031, a unit decrease in capital adequacy ratio will lead to an increase in financial performance by 0.555.

The study concludes that banks management should establish sound credit management based on a moderate credit policy, because, however small, it was established in the study that the more the appetite to lend is, the more likely the bank will lose its efficiency in controlling loans,

It's recommended to commercial banks to be adequately controlling their credit risk by keeping lower their ratio of nonperforming loans which is the major determinant of commercial banks' financial performance as shown in the study. They should also endeavor to be holding adequate capital for the sake of liquidity and going concern even if it undermines to some extent their capacity to maximize financial performance. To the BOU, it's suggested to require banks in Uganda to use credit metrics model in controlling its risks. Moreover, the central bank should enforce its supervision and make sure all regulatory rules it has established are followed by commercial banks in Uganda.

A salient limitation of this paper is no moderation or mediation effects were measured in studying the relationship between credit management indicators with the performance of commercial banks in Uganda; moderators or mediators should be included in future studies to come up with a model that can significantly explain the financial performance of commercial banks.

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