

## **Influence of Loan Commitments as Entrepreneurial Product on Financial Performance of Commercial Banks in Kenya**

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**ABSTRACT:** *This study aimed at determining the impact of loan commitments as entrepreneurial product on the financial performance of commercial banks in Kenya. Specifically the study sought to investigate the influence of loan arrangement, credit access and locking fixed mark up over interest rates on the financial performance of commercial banks in Kenya. The study adopted both descriptive and qualitative research designs and using a well-structured questionnaire, data was collected from 43 commercial banks operating in Kenya. From each of the 43 commercial banks, 2 senior management officials were interviewed making the total questionnaires administered to be 86. With a response rate of 99%, the data was screened for errors and analysed using SPSS version 16.0. The internal consistency of the questionnaire was tested by using Cronbach alpha and ranged between 0.708 and 0.825 averaging to 0.758. The results showed that loan commitments significantly correlated positively with financial performance of commercial banks in Kenya ( $r = 0.224, p < 0.05; \beta = 0.224, p < 0.05$ ). Similarly credit access correlated significantly positively with financial performance of commercial banks ( $r = 0.263, p < 0.05; \beta = 0.263, p < 0.05$ ). Locking fixed mark up over interest rates also correlated significantly positively with financial performance of commercial banks ( $r = 0.234, p < 0.05; \beta = 0.234, p < 0.05$ ). This therefore implies that commercial banks in Kenya should explicate on loan commitment as an off-balance sheet product to boost their financial performance.*

**Keywords:** *Loan commitment, loan arrangement, credit access, fixed mark up, financial performance*

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### **I. INTRODUCTION**

Reliance on balance products has been the main focus of many commercial banks in increasing their financial performance. Due to increased competition, economic conditions and other banking conditions, financial institutions have diversified their product base and particularly entered into new products areas that generate non-interest income (Mirza and Holt, 2011). Jurman, (2005) reported that the development and deregulation of the financial markets, improvements in financial innovation and decreases in banks' margins, as a result of low-quality loan applicants, encouraged banks to offer new products and services to increase their profits. Edwards and Mishkin (1995) also argues that the rate of traditional banking has been decreasing while the off-balance sheet (OBS) activities have been increasing. He further adds that decreasing profitability of traditional banking and increasing competitiveness of markets actually forces banks to undertake OBS activities.

This paper therefore aims at examining the effect of off-balance sheet activities on the financial performance of commercial banks operating in Kenya. Specifically the study investigates the influence of loan arrangement, credit access and locking fixed mark up over interest rates on the financial performance of commercial banks in Kenya. It tests three hypothesis that: Ho<sub>1</sub>: Loan arrangement as an off-balance sheet product does not significantly affect the financial performance of commercial banks in Kenya. Ho<sub>2</sub>: Credit access as an off-balance product does not significantly affect the financial performance of commercial banks in Kenya. Ho<sub>3</sub>: Locking fixed mark up over interest rates as an off-balance product does not significantly affect the financial performance of commercial banks in Kenya.

### **II. METHODOLOGY**

This methodology section presents the research design, target population, sampling techniques, data collection, analysis and presentation techniques used during the study.

#### **2.1 Research Design**

The study adopted mixed method design where both the descriptive and qualitative research designs were used. According to Creswell (2003), descriptive survey designs are used in preliminary and exploratory studies to allow researchers to gather information, summarize, present data, and interpret it for the purpose of

clarification. It involves using questionnaires and sometimes interview tests, and generalizing the results of the sample to the population from which it is drawn. Kothari (2004), states that descriptive survey design is flexible enough to provide opportunity for considering different aspects of a problem under study.

## **2.2 Target Population**

Mugenda and Mugenda (2003) describes population as the entire group of individuals or items under consideration in any field of inquiry and have a common attribute. This study targeted all the 43 commercial banks operating in Kenya. From each of the 43 commercial banks, senior management employees were targeted to give the views of the banks they represented.

## **2.3 Sample and Sampling Technique**

This study involved a total of 43 commercial banks in Kenya focusing on top managers because they are well equipped with the operations of the banks. According to Mugenda and Mugenda (2003), a sample of 10- 30 % is good enough if well-chosen and the elements in the sample are more than 30. Based on the population, the sample were drawn using the purposive sampling method where at least 2 members of the senior management such as the manager, credit manager and relationship manager from each bank at the head quarter were selected. This resulted to 86 respondents.

## **2.4 Measures**

A well-structured questionnaire with a Likert scale was used to measure both the dependent and independent variables. Each questionnaire consisted of statements or questions answered on a five-point scale, varying from very little extent (10%-20%), little extent (21%-40%), average extent (41%-60%) great extent (61%-80%) to very great extent (81%-100%).

## **2.5 Data Collection Instruments**

Questionnaires were the main tool for the collection of primary data. This questionnaires comprised of both structured and unstructured questions. Copper and Shindler (2003), state that structured questions necessitate getting as much information as possible from the limited space on the form. Unstructured questions provide the respondents with an opportunity to express their opinions, ideas and thoughts freely. Thus the questionnaires were unstructured to enable the researcher get information, ideas, opinions and thoughts freely from the senior managers of the various banks. The respondents were also encouraged to give an in-depth response without feeling held back in revealing any information. The study also used an interview schedule and an observation checklist which was analogous to the questionnaire. Personal interview method and structured observation were also used. In addition, secondary data was collected from literature material available.

## **2.6 Pilot testing**

To ascertain the validity and reliability of questionnaire, a pilot survey was performed on 4 commercial banks selected at random. This pilot testing enabled for the establishment of the accuracy and appropriateness of the research design and instrumentation and provided proxy data for selection of a probability sample (Saunders *et al.*, 2007). To maximize on the reliability of the questionnaire, the approach to research design construction included framing each question tightly and clearly to reduce ambiguity and avoid any demand bias; sequencing onerous questions towards the end of the survey; keeping open questions to a minimum; devising response scales that will increase the variability of response, thereby ensuring high statistical value from data as stated by Cooper & Schindler, (2003).

### **2.6.1 Reliability**

Internal consistency of the data collection instrument was tested through the Cronbach's alpha method (Cronbach, 1951). Using item inter-item correlation matrix as a guide, items that strongly contributed to alpha, and whose content were not critical, were eliminated as guided by Mugenda, (2008). Cooper & Schindler, (2003) argues that Cronbach's alpha has the most utility for multi-item scales at the interval level of measurement, requiring only a single administration and provides a unique, quantitative estimate of the internal consistency of a scale. Sekaran, (2003) reports that reliabilities less than 0.6 are considered to be poor, those in the 0.70 range, acceptable, and those over 0.80 good.

## **2.7 Data Analysis**

Data analysis was done using SPSS version 16.0. The data was checked for errors through data screening and the scale reliability test was applied to check the reliability of the scale developed to undertake the present research. Descriptive information was analysed using dominant responses technique to determine common reactions and consistencies that cut across majority of the respondents. Descriptive measures such as percentages and frequencies were used to draw inferences and make conclusions. Statistical information was analysed using linear regression model to give inferences to the data obtained, multiple regressions to determine the form of the relationship between the dependent variable and the independent variables and ANOVA to judge the significance of the findings.

The study adopted multiple regression model shown in equation 1 to establish the effects of loan arrangement, credit access, locking fixed mark up over interest rates and on performance of commercial banks in Kenya.

$$Y = A_0 + aX_1 + aX_2 + aX_3 + e$$

*Equation 1*

Where: Y = Dependent variable (Financial performance of commercial banks in Kenya)  
 A<sub>0</sub> = constant term  
 X<sub>1</sub> = loan arrangement  
 X<sub>2</sub> = Credit access  
 X<sub>3</sub> = Fixed mark up

### 2.8 Measurement of Variables

The financial performance of commercial banks (dependent variable) variable was measured through liquidity ratios (current ratio, quick ratio and cash ratio), leverage ratios (debt ratio and debt equity ratio), activity ratios (inventory turnover and debtor's turnover) and profitability ratios (gross profit margin and net profits) ratios. The independent variable (loan commitments) by entrepreneurial commercial banks was assessed by determining the extent to which loan arrangements, credit access and fixed mark-up over reference interest rates affects the financial performance of the of commercial banks. In measuring both the dependent and independent variables, questions were designed with alternative answers expressed in a Likert scale from 10% - 20% - very little extent; 21% - 40% - little extent; 41% - 60% - average extent; 61% - 80% - great extent and 81% - 100% - very great extent.

## III. RESULTS AND DISCUSSIONS

### 3.1 Sample Characteristics

A total of 43 commercial banks were visited and their characteristics are as shown in table 1. From each of the 43 commercial banks, 2 senior management officials were interviewed making the total questionnaires administered to be 86. Out of the 86 questionnaires administered, 85 were returned representing 99% response rate. Mugenda (2003) opines that a response rate of above 70% is acceptable in research. Both medium (56.5%) and large (43.5%) commercial banks were considered in this study with most of them (57.6%) having been in operation for over 15 years.

**Table 1:** Sample characteristics

Characteristics	Category	Frequency	%
Size of organization	Medium ( 500 employees)	48	56.5
	Large (Over 500 employees)	37	43.5
Age of organization	11-15	36	42.4
	Above 15 years	49	57.6
Source: Author, 2017			

### 3.2 Descriptive Statistics

This study aimed at determining the impact of loan arrangements, credit access, locking fixed mark up over interest rate on the financial performance of commercial banks in Kenya. Results for the descriptive statistics for both the dependent variable (financial Performance) and the independent variables (loan arrangements, credit access, locking fixed mark up over interest rate) are presented as shown in section 3.2.1 to 3.2.3.

#### 3.2.1 Loan arrangements

Table 2 shows respondents' opinions on the impact on loan arrangements on the financial performance of commercial banks. It is indicative that majority of the respondents feel that loan arrangements improves the financial performance of commercial banks in Kenya to a great extent (Mean = 4).

**Table 2:** Descriptive statistics on loan arrangements

	N	Minimum	Maximum	Mean	Std. Deviation
Loan arrangements improves current ratio	85	2	4	3.61	.599
Loan arrangements improves debt ratio	85	2	4	3.46	.665
Loan arrangement have improved inventory turnover	85	2	5	3.42	.770
Loan improvement have improved the debt equity ratio	85	2	5	3.56	.680

1= very little extent; 2 = little extent; 3= average extent; 4 = great extent; 5 = very great extent.

Source: Authors, 2017

### 3.2.2 Credit Access

Response on the impact of credit access on the financial performance of commercial banks revealed that most banks agreed to a great extent (mean = 4) that access to credit facilities help to improve the performance of commercial banks in Kenya (table 3).

**Table 3: Descriptive statistics on credit access**

	N	Minimum	Maximum	Mean	Std. Deviation
Credit access have improved current ratio	85	2	5	3.75	.615
Credit access have improved quick ratio	85	2	5	3.74	.639
Credit access have improved cash ratio	85	2	5	3.73	.679
Credit access have improved debt ratio	85	2	5	3.65	.702
Credit access have improved debt equity ratio	85	2	5	3.69	.708
Credit access have improved current inventory turnover	85	2	5	3.58	.605
Credit access have improved debtors turnover	85	3	5	3.54	.524
Credit access have improved gross profit margin	85	3	5	3.98	.597

1= very little extent; 2 = little extent; 3 = average extent ; 4 = great extent; 5 = very great extent.

Source: Authors, 2017

### 3.2.3 Fixed mark up

As shown in table 4, all the respondents agreed to a great extent (Mean = 4) on the positive contribution of fixed mark up over interest rates on banks performance.

**Table 4 : Descriptive statistics on Fixed mark up**

	N	Minimum	Maximum	Mean	Std. Deviation
Locking fixed markup over reference interest rates have improved quick ratio.	83	2	4	3.57	.609
Locking fixed markup over reference interest rates have improved cash ratio.	85	2	5	3.52	.750
Locking fixed markup over reference interest rates have improved debt ratio.	85	2	5	3.74	.774
Locking fixed markup over reference interest rates have improved debt equity ratio.	85	2	5	3.52	.868
Locking fixed markup over reference interest rates have improved inventory turnover ratio.	84	2	5	3.88	.762
Locking fixed markup over reference interest rates have improved debtors ratio.	85	2	5	3.65	.702
Locking fixed markup over reference interest rates have improved gross profit margin.	85	2	5	3.55	.646
Locking fixed markup over reference interest rates have improved return on investment.	85	2	5	3.58	.605

1= very little extent; 2 = little extent; 3 = average extent ; 4 = great extent; 5 = very great extent.

Source: Authors, 2017

## 3.3 Diagnostic tests

### 3.3.1 Normality Test

Table 5 shows the normality test result for both dependent and independent variables. Based on the skewness and kurtosis statistics values, the data is assumed to be normal. George & Mallery (2010), opines that values for asymmetry (skewness) and kurtosis between -2 and +2 are considered acceptable in order to prove normal univariate distribution.

**Table 5: Descriptive Statistics**

	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Skewness		Kurtosis	
							Statistic	Std. Error	Statistic	Std. Error
v.pb.4.4	85	2	5	291	3.42	.777	.027	.261	-.348	.517
v.pb.6.8	85	3	5	338	3.98	.597	.007	.261	-.102	.517
sec5.12	85	2.00	5.00	322.00	3.7882	.72529	-.611	.261	-.574	.517
v.pb.9.6	85	2	5	330	3.88	.762	-.292	.261	-.199	.517
Valid N (listwise)	85									

Source: Authors, 2017

### 3.4 Reliability Analysis

The internal consistency of the data collection tool was determined using Cronbach’s alpha. The value ranged between 0.708 and 0.825 averaging to 0.758 indicating acceptable levels (table 6). This indicates that the variables used had good internal consistency. Cronbach (1951) and Nunnally (1978) argues that alpha values of 0.70 or above for the reliability coefficient are considered acceptable.

**Table 6: Summary of reliability analysis**

Objective addressed	No. of items	Achieved Cronbach’s Alpha
<b>Financial Performance</b>	6	0.877
<b>Loan arrangement</b>	4	0.708
<b>Credit access</b>	8	0.825
<b>Fixed mark up over interest rates</b>	8	0.741

Source: Authors, 2017

### 3.5 Correlation Analysis

To establish the direction of the relationship between dependent and independent variables, correlation analysis was used. The correlation results in table 7 shows a weak positive significant correlation between loan arrangement and the performance of commercial banks in Kenya ( $r = 0.224$ ,  $p < 0.05$ ). Similarly the result also shows a weak positive significant correlation between credit access and performance of commercial banks in Kenya ( $r = 0.263$ ,  $p < 0.05$ ).

The findings further shows a weak positive significant correlation between fixed mark up over interest rates and performance of commercial banks in Kenya ( $r = 0.234$ ,  $p < 0.05$ ).

**Table 7: Correlation results**

	Performance	Loan arrangement	Credit access	
Performance	1			
Loan arrangement	.224*	1		
Credit access	.263*	-.004	1	
Locking fixed mark up over interest rates	.234*	-.035	.046	1

\*. Correlation is significant at the 0.05 level (2-tailed).

Source: Authors, 2017

### 3.6 Regression Analysis

In this study, the impact of loan commitments on the financial performance of commercial banks was assessed by determining the impacts of loan arrangements, credit access and locking fixed mark up over reference interest rates on performance of commercial banks as detailed in sub-sections 3.3.1 to 3.3.3. Stoner (2003) as cited in Turyahebya (2013), defines financial performance as the ability to operate efficiently, profitably, survive, grow and react to the environmental opportunities and threats.

#### 3.6.1 Impact of loan arrangements on financial performance

Based on the findings in table 8, the regression model was statistically significant ( $r^2 = 0.050$ ,  $p < 0.05$ ) indicating that loan arrangement contributes 5% of the variation observed in financial performance of commercial banks in Kenya. Nzotta (2004) point out that credit management greatly influences the success or failure of commercial banks and other financial institutions. He attributes this to a large extent by the quality of credit decisions and thus the quality of the risky assets.

**Table 8: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.224 <sup>a</sup>	.050	.039	.71105

a. Predictors: (Constant), Loan arrangements

Source: Authors, 2017

Achou and Tenguh (2008) while studying the relationship between bank performance and credit risk management found out that there is a significant relationship between financial institutions performance (in terms of profitability) and credit risk management (in terms of loan performance)

Anova results in table 9 indicates that the model is statistically significant ( $p < 0.05$ ).

**Table 9: ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.224	1	2.224	4.398	.039 <sup>a</sup>
	Residual	41.965	83	.506		
	Total	44.188	84			

a. Predictors: (Constant), Loan arrangements

b. Dependent Variable: Financial performance

Source: Authors, 2017

The standardized Beta value of 0.224 implies that there is 0.224 significant increase in financial performance for each unit increase in loan arrangements (table 10).

**Table 10: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.072	.350		8.769	.000
	Loan arrangement	.209	.100	.224	2.097	.039

a. Dependent Variable: Financial performance

The equation connecting financial performance of commercial and loan arrangement becomes:

$$Y = 3.072 + 0.209X_1 + 0.1$$

### 3.6.2 Impact of credit access on financial performance

Hypothesis on credit access stated that credit access as an off- balance sheet product do not affect the performance of commercial banks in Kenya. Based on the findings in table 11, the regression model was statistically significant ( $r^2 = 0.069$ ,  $p < 0.05$ ) indicating that credit access contributes to 6.9% the variation observed in the performance of commercial banks in Kenya. According to Nkurunziza (2010), while taking a study on Kenya manufacturing sector for the period 1992-1994 showed a positive and significant coefficient on access to credit in a firm growth equation implying that firms with access to credit recorded higher growth rates than those without access to credit. In a similar study, Gatti and Love (2008) found strong evidence that access to credit is associated with high productivity.

**Table 11: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.263 <sup>a</sup>	.069	.058	.70392

a. Predictors: (Constant), Credit access

Source: Authors, 2017

Access to credit can also influence productivity by enabling firms to take advantage of new business opportunities (World Bank, 2008). Osei-Assibey (2013) states that credit influences productivity by acting as an enabler for the drivers of productivity which include managerial and technical skills, investment in better technology, innovation, and competition.

Anova results in table 12 indicates that the model is statistically significant ( $p < 0.05$ ) an indication that access to credit significantly affect the financial performance of commercial banks in Kenya.

**Table 12: ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.062	1	3.062	6.179	.015 <sup>a</sup>
	Residual	41.126	83	.495		
	Total	44.188	84			

a. Predictors: (Constant), Credit Access

b. Dependent Variable: Financial performance

Source: Authors, 2017

Wolf (2007) reports that firms facing credit constraints would not be able to invest in new equipment, reorganize their production processes, enhance research and development activities, gain access to high quality inputs, train workers or improve their products, all of which are necessary for productivity improvement. The standardized Beta value of 0.263 implies that there is up to 0.263 significant increase in financial performance for each unit increase in credit access (table 13).

**Table 13: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.517	.517		4.867	.000
	Credit Access	.320	.129	.263	2.486	.015
a. Dependent Variable: Financial performance						

The equation connecting financial performance of commercial and credit access becomes:

$$Y = 2.517 + 0.32X_2 + 0.129$$

### 3.6.3 Impact of locking fixed mark up over reference interest rates

Hypothesis on locking fixed mark up over reference interest rates stated that locking fixed markup over reference interest rates as an off- balance sheet product do not affect the commercial banks performance in Kenya. Based on the findings in table 14, the regression model was statistically significant ( $r^2 = 0.055$ ,  $p < 0.05$ ) indicating that locking fixed mark up over reference interest rates contributes 5.5% the variation observed in the performance of commercial banks in Kenya. This therefore led to the rejection of the null hypothesis and instead conclude that locking fixed mark up over reference interest rates significantly affects the financial performance of commercial in Kenya.

**Table 14 :Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.234 <sup>a</sup>	.055	.044	.70934
a. Predictors: (Constant), Locking fixed mark up over reference interest rates				

In a similar study, Kipngetich (2011) while using regression model to investigate the relationship between interest rates and ROE with financial performance as the independent variable and interest rate as the dependent variable established that there is a positive relationship between the two variables though the effect of interest rates on profitability was not significant in the all the banks.

Anova results in table 15 shows that the model is statistically significant ( $p < 0.05$ ) an indication that fixed mark-up significantly affect the financial performance of commercial banks in Kenya.

**Table 15: ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.426	1	2.426	4.821	.031 <sup>a</sup>
	Residual	41.763	83	.503		
	Total	44.188	84			
a. Predictors: (Constant), Locking fixed mark up over reference interest rates						
b. Dependent Variable: Financial performance						

The standardized Beta value of 0.234 implies that there is 0.234 significant increase in financial performance for each unit increase in Locking fixed mark up over reference interest rates (table 16).

**Table 16: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.923	.402		7.279	.000
	Locking fixed markup over interest rates	.223	.102	.234	2.196	.031
a. Dependent Variable: Financial performance						

The equation connecting financial performance of commercial and locking fixed markup over reference interest rates becomes:

$$Y = 2.923 + 0.223X_3 + 0.102$$

## IV. CONCLUSION

Based on the findings of this study, it is concluded that loan commitments influences the financial performance of commercial banks in Kenya. Precisely loan arrangement positively and significantly influence the financial performance of commercial banks in Kenya ( $r^2 = 0.05$ ,  $\beta = 0.224$ ,  $p < 0.05$ ). Access to credit positively and significantly influence the financial performance of commercial banks in Kenya ( $r^2 = 0.069$ ,  $\beta = 0.263$ ,  $p < 0.05$ ). Finally it is also concluded that locking fixed mark up over interest rates positively and significantly influences the financial performance of commercial banks in Kenya ( $r^2 = 0.055$ ,  $\beta = 0.234$ ,  $p <$

0.05).

## V. RECOMMENDATIONS

It is recommended that the management of commercial banks in Kenya should consider promoting loan commitment as an off- balance sheet product to increase their financial performance. Specifically the banks should promote approaches towards enhancing loan arrangements, credit access and locking fixed mark-up on interest rates.

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## REFERENCES

- [1]. Cooper, D.R., & Schindler, P.S. (2003). *Business Research Methods*. (8<sup>th</sup>ed.). Boston:15 McGraw-Hill Irwin.
- [2]. Creswell, J. (2003). *Research design:Qualitative, quantitative and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- [3]. Cronbach, L. J. Ì (1951). Coefficient alpha and the internal structure of tests. *Psychometrika* 22:3, , pp. 297-334.
- [4]. Edwards, F.R., Mishkin, F.S. "The decline of traditional banking: Implications for financial stability and regulatory policy", *Federal Reserve Bank of New York Economic Policy Review*, 1 (2), (1995): 27-45.
- [5]. Gatti, R. and Love, I., (2008). "Does Access to Credit improve Productivity? Evidence
- [6]. Jurman, A. (2005). "Croatian bank investments securities", *Journal of Economics and Business*, Proceedings of Rijeka Faculty of Economics, Vol. 23. No. 2., University of Rijeka, Faculty of Economics: 313-338..
- [7]. Kipngetch, Korir M (2011) *Relationship between Interest rate and Return on Equity*. (unpublished MBA project). University of Nairobi, Kenya
- [8]. Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*. New Delhi: New Age International (P) Ltd.
- [9]. Mugenda, O.M and Mugenda, A.G (2008) *Research Methods, Quantitative & Qualitative Approaches*, Acts Press, Nairobi.
- [10]. Nkurunziza, J., (2010). "The Effect of Credit on Growth and Convergence of Firm Size in Kenyan Manufacturing." *Journal of International Trade and Economic Development from Bulgaria.*" *Economics of Transition*, Vol. 16(3), pp. 445-465.
- [11]. Nzotta, S. M. (2004) *Money, Banking and Finance, Theory and Practice* Owerri. Hudson Jude Publishers.
- [12]. Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York, NY: McGraw-Hill.
- [13]. Osei-Assibey, E., (2013). *Source of Finance and Small Enterprise's Productivity Growth in Ghana?* *African Journal of Economics and Management Studies*, Vol. 4 Iss: 3, pp. 372-386.
- [14]. Sekaran, U. (2003) *Research Methods for Business: A Skill-Building Approach*. 4th Edition, John Wiley & Sons, New York.
- [15]. Turyahebwa, A (2013) *Financial Performance in the Selected Microfinance Institutions In Uganda* (unpublished master's thesis) Kampala International University, West campus.
- [16]. World Bank, (2008). "Finance For All? Policies and Pitfalls in Expanding Access." A World Bank Policy Research Report (PRR). World Bank, Washington D.C.

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