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## **Management Control System and Financial Performance of Micro Finance Institutions in Central Region Uganda**

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### **Abstract**

*Microfinance institutions (MFIs) worldwide have been seen and identified as a vital institution to nations' quest for solutions to the development challenge (CGAP, 2016). Micro finance in Uganda is a vibrant growing industry and the government of Uganda has over the past decade initiated implemented and or supported various micro credit schemes aimed at fighting poverty in the country. Microfinance has evolved by providing micro credits to respond to the furthestmost financial and non-financial needs of the citizens, to eradicate poverty and increase financial*

*inclusion. Most studies undertaken in the past few years have focused mainly on outreach of MFI's and their impact on profitability and not on internal control system and lack of clarity on the extent to which internal control system influences financial performance (Narver, 2007) will therefore continue to inhibit common understanding and explanation which might deter performance improvement in Ugandan microfinance institutions. Failure by MFIs to monitor portfolio quality closely and take action when necessary and this has threatened the going concern of microfinance industry in Uganda. The study analyzed the relationship between Management control system and financial performance of MFIs in central region Uganda and it was hypothesized that Management control system positively influences financial performance of MFIs in central region Uganda. MFIs have come under spotlight for cases of poor financial performance. Lack of empirical studies to assess the impact of Management control system on the financial performance of microfinance institutions in Uganda is the motivation behind this study. Therefore, this study is important not only because it fills the gap, but also it is set out to address this evident knowledge gap. The study adopted positive-phenomenological, epistemology and quantitative-qualitative methodology dimension with cross sectional and correlation designs, the unit of analysis was Microfinance Institutions registered with Association of Microfinance Institutions, and employees were the units of inquiry. Structural Equations Modeling with Analysis of Moment Structures were used to for statistical modeling*

*Besides, Hierarchical regression was used to test the predictive power of the variables and indicate precisely what happens to the model as different predictor variables are introduced in the model fit. This study revealed that two of the predictor variables are strong predictors of financial performance of MFIs. The study further revealed that Management control system was found to be strongly and positively correlated with financial performance. And Management control system elements were found to be positive predictors of financial performance. The present study supported a multi-theoretic approach in explaining financial performance of MFIs in Uganda. The study supports the stewardship theory in explaining the controls system together with stakeholder as the theories that help in explaining financial performance of MFIs. The study confirmed efficient control system factor structure of observed variables and the latent variables. As a result, the study provided models for efficient Management control systems. These models can then be used to provide a trajectory for improving financial performance of MFIs in Uganda. Regardless of the existence of controls in MFI, the results revealed that Management control systems were less efficient due to lack of close monitoring. It recommended that MFIs should enhance controls to ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's goals. Policy makers, AMFIU, PSFU and MFIs may use these findings as a way of improving financial performance of MFIs in Uganda since the MFIs are great contributors to the Ugandan economy*

*Key Words : Management Control System, Financial Performance, microfinance, Institution*

## Introduction

Microfinance has evolved by providing micro credits to respond to the furthestmost financial and non-financial needs of the citizens, to eradicate poverty and increase financial inclusion .The microfinance movement has received enthusiasm as a poverty alleviation tool that has eventually become a self-sustaining industry. Microfinance institutions (MFIs) worldwide have been seen and identified as vital institution to nations' quest for solutions to the development challenge (CGAP, 2016). Most microfinance institutions have embraced a more business-oriented outlook and maintained their target groups of economically-active poor, in order to achieve financial sustainability (Kalyango, 2004; Baguma, 2008). The micro finance institutions in developing economies are widely growing from time to time. Various studies on different countries on the performance of the MFIs confirm this (Adongo and Stork 2005, Zeller and Meyer 2002, Meyer 2002, Robert cull et al. 2007). Approaches used by microfinance institutions in Uganda to deliver financial services to the poor are similar to those used in other countries where microfinance institutions operate. The approach used depends on the nature and structure of the respective microfinance institution. The institutions providing microfinance services include: Tier I: formal financial institutions Commercial banks, TierII; credit institutions, Tier III; microfinance deposit taking institutions, Tier IV; Saccos (BOU Policy on MFIs 1999).

Microfinance institutions in Uganda from time and again been faced with high operating costs to provide financial services to the poor people and Small and Medium Enterprises (Micro banking Bulletin, 2002). And as such, are unable to meet their obligations when they become due usually resulting from poor cash flow planning, failure to monitor portfolio quality closely and take action when necessary. Portfolio quality has deteriorated more rapidly in Microfinance institutions than in traditional financial institutions due to the short-term and unsecured nature of micro lending and micro loan portfolios (Srinivasan, 2006 due to unsecured nature of micro lending, micro loan portfolios which are volatile. IMF Report (2001) most MFIs in Uganda had large portfolios in arrears, with overdue loan repayments stretching back into the distant past mainly because lending policies were usually poorly enforced and systems to track and manage arrears. An enduring problem facing microfinance institutions, however, is how to attain financial sustainability (Dunford, 2003; Schreiner, 2000; Woller 2000; Hollis and Sweetman, 1998; Christen et al, 1995). This problem has attracted attention of numerous researchers in recent decades and, as a result many strategies have been identified to ensure that institutions are sustainable (Randhawa and Gallardo, 2003; Schreiner, 2000; Yaron, 1992). Abernethy and Brownell (1999) discussed the interactive use of management control systems and their experimental findings indicated that interactive use of internal control systems can alleviate disruptive performance in a business enterprise. Ledgerwood (1999) as cited by Lincoln Arsyad (2005), conceptualizes financial performance as; Financial viability (operational self-sufficiency, financial self-sufficiency) Profitability (return on assets ratio, return on business ratio, return on equity ratio) and Portfolio quality (portfolio at risk, repayment rates). Financial performance being a critical factor in the success of microfinance Institutions, therefore, this research focused on financial performance and not social performance

Most of the studies on financial performance of microfinance institutions apply and use different methodologies as in the case of Tilahun (2009) , however this study employed a descriptive research design based on quantitative data. The researcher collected and analyzed annual reports using descriptive statistics. A number of theories have been used to explain what influences the financial performance of the firm but their applications have no terminal point. Theories that have been used to explain firm financial performance include, among others Resource-Based View of the firm (RBV), agency theory (Jensen and Meckling 1976), stakeholder theory (Freeman 1984), and stewardship theory. All these theories provide a detailed account of firm performance using available resources inspite of the limitations in their application. Though there is no agreed theoretical base for research on financial performance of microfinance institutions (Parum, 2005), a review of the literature indicates that the above four main theoretical frameworks have been used to explain and analyse the association between management control system and financial performance of microfinance institutions.

Poor financial performance marked by deteriorating returns and portfolio quality has taken a center stage and remained unexplained in microfinance Institutions (Performance Monitoring Tool 2006/2009/). Portfolio quality has deteriorated more rapidly in Microfinance institutions than in traditional financial institutions due to the short-term and unsecured nature of micro lending, micro loan portfolios which tend to be more volatile (Ssewanyana 2009). According to the IMF Report (2001) most MFIs in Uganda had large portfolios in arrears, with overdue loan repayments stretching back into the distant past mainly because lending policies were usually poorly enforced and systems to track and manage arrears hardly existed. Microfinance institutions in Uganda face poor cash flow problems due to changes in market interest rate and failure to monitor portfolio quality closely and take action when necessary and this has threatened the going concern of microfinance industry in Uganda (Bank of Uganda 2010/2011) Most studies undertaken in the past few years have focused mainly on outreach of MFI's and their impact on profitability (Migiri, 2002). Lack of clarity on the extent to which internal control system influences financial performance (Narver, 2007) will therefore continue to inhibit common understanding and explanation which might deter performance improvement in Ugandan microfinance institutions. Though some studies have identified ICS as a possible predictor of financial performance in different industries, there are still gaps as a result of absence of representative empirical studies that would address the issue of financial performance of microfinance institutions as a result of Management control systems (PekChen, 2005).More so, theories and models apparently used to explain financial performance in firms have proved to be weak and inadequate in explaining this phenomenon.

This study enabled microfinance firms to have a more definite and direct understanding of the elements of management control system that can influence performance. Besides, understanding of how management control system elements combine to influence firm performance can lead to better resource allocation, which eventually may promote performance in microfinance institutions.

Empirical studies aimed at assessing the impact of Management control systems on the financial performance of Microfinance Institutions in Uganda are missing. Therefore, this study is important because it fills this gap of knowledge

## Literature Review

A number of theories have been used to explain what influences the financial performance of the firm but their applications have no terminal point. Theories that have been used to explain firm financial performance include, among others Resource-Based View of the firm (RBV), agency theory (Jensen and Meckling 1976), stakeholder theory (Freeman 1984), and stewardship theory. All these theories provide a detailed account of firm performance using available resources inspite of the limitations in their application. There are various forms that have been used to examine the way contextual factors are related to aspects of Management control System with an attempt to assess whether this association is linked to financial performance of Microfinance Institutions.

Though there is no agreed theoretical base for research on financial performance of microfinance institutions (Parum, 2005), a review of the literature indicates that the above four main theoretical frameworks have been used to explain and analyse the association between magement control system and financial performance of microfinance institutions

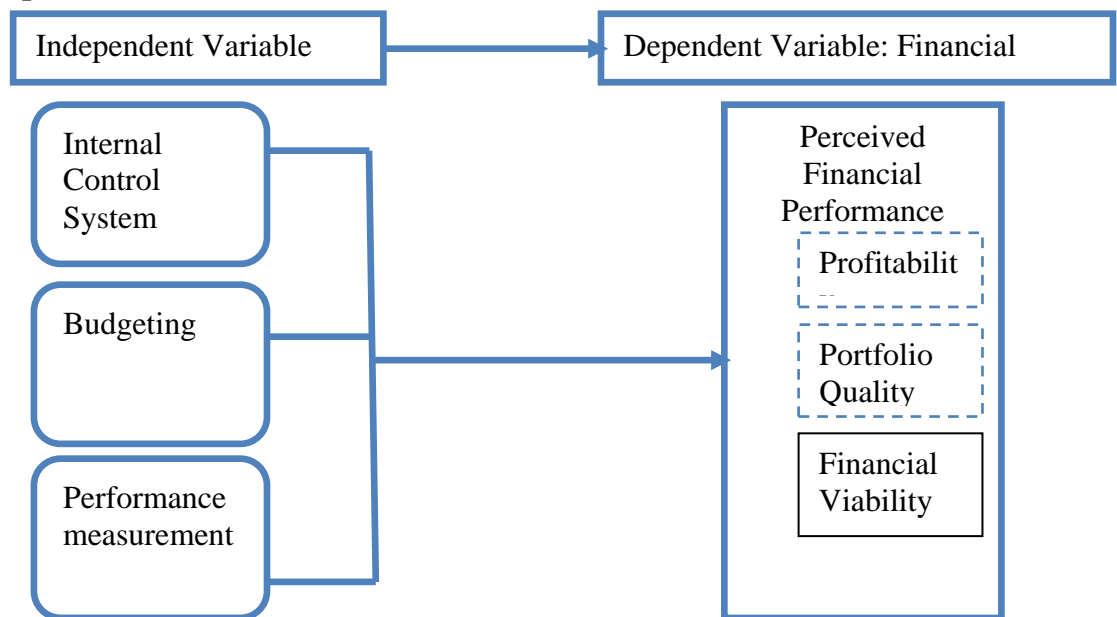
Synthesizing existing studies in the broad area of explaining financial performance of MFIs, indicate a clear dearth of studies examining multiplicative effect of various elements the predictor variable ie Management control system(Internal Control System, Budgeting, Performance Measurement ) on financial performance of MFIs .

## Model Specification

Management control system has been conceptualized from the Contingency point of view that assumes that the design and the application of management control systems are influenced by the context in which they are applied (Chenhall, 2007). A contingency approach to management control systems aims at identifying the best design, usage and application of Management control system in a given context (Chenhall and Chapman, 2006).This study follows the use of management control systems and examines the way contextual factors are related to aspects of management control system with attempt to assess whether this association is linked to financial performance of Microfinance Institutions. Any controlled system requires objectives and goals against which its performance can be assessed and the existence of different goals is likely to involve the selection of different performance measures and controls

The contingency approach was cited and explained by Simons’ (1995) levers of management system control model that requires management of effective companies to know how to achieve high degrees of high control efficiency and performance. Simon argued that it is not the identification of controls associated with particular strategies that are important, but the distribution of management attention and efficiency of controls that can lead to high degrees of performance. Simons (1995) organises management control system tools into a coherent model called “levers of control

**Figure 1: Conceptual Frame Work**



To understand management control system and financial performance variables in relation to microfinance institutions, the major management control system pillars i.e. budgeting, performance measurement, internal control system are dissected. Financial performance especially relating to microfinance institutions is also reviewed based on the performance dimensions comprising: Profitability, portfolio quality and financial viability. The significance of Management control system in microfinance institutions is also highlighted. These are compressed in a conceptual framework as shown above. From the conceptual framework above, the hypothesis was structured to ascertain the extent to which management control system can influence financial performance. This was expressed as:

$$Y=a+bx$$

$$FPM= f(MCS)$$

$$Y=\alpha_0+\beta_1ICS_1+\beta_2BDGT_2+\beta_3PFM_3+4 +\mu.....$$



Where

Y = Financial performance (proxied by Profitability, portfolio quality, financial viability)

Key predictor of Management control system is given as

ICS<sub>1</sub> = Internal control System, BDGT<sub>2</sub> = Budgeting, PFM<sub>3</sub> = Performance Measurement

Simon (1995), asserted that Management control systems have different impacts on organization performance, Abernethy and Brownell (1999) discussed the interactive use of internal control systems and their experimental findings indicated that interactive use of internal control systems can alleviate disruptive performance when a company is changing its strategies, Davila (2000), in his study his study findings indicated that different strategies will need different interactive use of management controls to raise firm performance.

Welsh (2003), Simons (1995), Chow et al (1999), Merchant (2007), appreciate that Management control systems are the formal, information-based routines and procedures managers that ensure that errors and fraud are detected, safe guard company's assets and opine that MCS greatly influences firm performance.

Recent studies draw from the original organizational theorists (Burns & Stalker 1961, Lawrence & Lorsch 1967, Thompson 1967, Perrow 1970, Galbraith 1973) to develop arguments that explain how the effectiveness of control systems (Chenhall 2003).

Bisbe and Otley (2004), findings indicated that the application of control systems has a huge contingency effect on firm performance. However, Bisbe's research did not discuss the importance of human effect to control system (Snell, 1992; Abernethy and Brownell, 1997; Keller, 2001; Widener, 2004)

Dexon (2010), findings revealed that Management Control Systems have a significant positive effect in achieving Value for Money. All the constructs of Internal Control Systems (Control environment, control activities, risk assessment) have a significant positive relationship with Value for Money in a business entity

Internal control process reduces uncertainty and improves firm performance, Ivancevich (1976), Steers (1976), Imoisili (1989), Locke & Schweiger (1979), Mia (1989), Ezzamel (1990), Hirst & Lowy (1990) etc. Another study on control process and firm performance relationship by scholars (Merchant, 1980; Peel & Bridge, 1988; Edward, et al., 2001) and empirical results (Merchant, 1980) show that control systems enhance the accuracy the degree of information accuracy. In turn, it results in higher performance in organizations. The increased use of comprehensive ICS practices can be assumed to result in better improved financial performance

among firms (e.g. Chenhall 2003, see also discussions in Gul 1991, Gul & Chia 1994, Hoque & James 2000, Ittner et al. 1998, 1998, Scott & Tiessen 1999)

Management Control System acts as a driver variable in firm strategy and performance as found in Chong & Chong (1997) and Baines & Langfield-Smith (2003). Report of bank of Uganda (2002), Simon (1995), results showed that there is indeed a positive association between certain internal control practices when are used concurrently with other strategic initiatives and improvement in financial performance. Abernethy and Brownell (1999) also discussed the interactive use of management control systems and their experimental findings indicated that interactive use of internal control systems can alleviate disruptive performance when a company is changing its strategies. The findings confirm the report findings of Armesh (2010) on the influences of internal control system on organizational performance in Malaysia, which showed that Internal Control System influences the behavior and performance of the organizational to ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organization s objectives.

On the other hand however, McMahon (2001) did not find any significant relationship between use of Control practices and firm performance. Donaldson (2001) found no significant associations were between the use of comprehensive Management Control System and measures of growth in net sales and profitability.

Additionally, McMahon & Davies (1994) and McMahon (2001) have not found any significant relationships between internal control practices and performance of businesses. Thus, the empirical results on the relationship between various dimensions of Management Control System and performance seem to be rather mixed

Jonathan (2005), study findings revealed that most of the microfinance institutions in Namibia are not yet financially sustainable and it was attributed to the fact that interest rates that Microfinance institutions require to break-even exceed the ceiling imposed. Portfolio quality has deteriorated more rapidly in Microfinance institutions than in financial institutions (Srinivasan, 2006), Studies by Bontis (2002), Chong and Richardson (2006), explained similar performance trends in Portuguese. Study findings revealed that average ROA for MFIs is 3.57%. This concur with study findings of Lafourcade (2005), the findings revealed that, Africa MFIs have the lowest financial performance of ROA of 2% as compared to 7.6%-10% of Eastern Europe and Central Asia. The findings are in agreement with Tilahun (2009), study findings on ‘the financial performance and sustainability of microfinance institutions in Ethiopia’; the result of the study indicates that there was a negative shift in the performance indicators particularly in the year 2009 and the gross loan portfolio has declined by 15.73% in the year 2009.

Furthermore, contrary to Chong and Richardson (2006), study findings, McMahon (2001), did not find any significant relationship between use of control System of Australian business firms and profitability.



Furthermore, Perera et al. (1997) have also reported a respective non significant relationship in manufacturing firms. Malmi et al. (2004) likewise did not find a significant direct relationship between management practices and profitability, even though they reported an interaction effect of the practices and use of other relationship management control systems to be significant in relation to firm performance.

Both theoretical and empirical studies show that strong and efficient systems that maintain high levels of capital adequacy are important in determining financial institutions profitability. Sufian and Habibullah (2009), found out that good systems have a positive impact on bank profitability in China. This confirms Athanasoglou, et al. (2008, 2006) and Kosmidou (2008) who also finds a positive and significant effect of strong control system on bank profitability, reflecting the sound financial condition of banks. This shows that maintaining strong and efficient Management control system is highly associated with high financial performance in Microfinance Institutions (Gramling et al. 2004; Hermanson & Rittenberg 2003; 2004)

First, Reid & Smith (2000) found out those developing control systems, especially in the areas of management and accounting applications, lead to high firm performance, Reid & Smith (2002), Reid & Smith (2000, 2002) holds that high performers firms use and apply internal control systems for daily financial monitoring and for identifying important trends in key variables for their further survival. On the other hand, Reid & Smith (2002), argue that static performers at satisfactory financial levels tend not to value control systems as much as the others. Consequently, the relationship between Management control system and firm performance seem to be U-shaped

The foregoing reviews reveal that the application of Management control system elements in any organization differ and different interactive use of Management controls to raise firm performance.

The level, application and interactive use of internal control system in Ugandan microfinance industry is elusive. This, therefore, caused the need for a scientific investigation on the use internal control system elements influences financial performance in Uganda's microfinance industry. This necessitated the study to evaluate the relationship between internal control system and financial performance of the selected microfinance institutions in central region Uganda. Hence to the hypothesis that "*Management control system positively influences financial performance of microfinance institutions*"

## **Methodology**

The study adopted a positivist quantitative paradigm with cross sectional and correlation designs. Correlation design was used to establish relationships between internal control system and financial performance of MFIs. Logical positivism quantitative designs were applied in data collection, analysis and presentation which also helped to test hypothetical deductive

generalizations. The study population consisted of 36 MFIs in central region Uganda registered with AMFIU from where the sample size of 33 MFIs were determined comprising a sample of 356 which was consistent with the sample size guidelines of Ntoumanis (2001) and Field (2006). Ntoumanis (2001) and Field (2006), multistage, simple random sampling and purposive techniques were used. Primary and secondary data sources were used in the study. Structural Equations Modeling with Analysis of Moment Structures were also used to for statistical modeling.

Cronbach's alpha was used to test the reliability of the instruments and the instruments were found to be reliable at 0.78. Content validity of the two instruments was ensured through use of valid concepts which measure the study variables. Content validity was used to ensure that the questionnaire was content valid. The content validity results were obtained and for all the constructs were above 0.7 as recommended by Sakaran (2000). The study used Means and standard deviations in order to summarize the results. The means were used because they show a summary of data and standard deviation clearly shows how well the means represent the data (Field, 2009). Hierarchical regression was used to estimate the predictive power of the predictor variable on the criterion variable in the model fit.

## Findings and Discussion

### Descriptive characteristics

**Table 1: Mean and Standard deviations of the predictor and criterion Variables**

	N	Minimum	Maximum	Mean	Std. Deviation
Budgeting	356	1.75	4.00	3.23	.35
ICS	356	1.30	4.00	3.19	.27
P.Measurement	356	.82	4.00	3.21	.33
Financial Performance	356	.91	4.00	3.09	.25

**Source:** Primary data

The findings reveal that all mean scores of the constructs in question range between 3.09 and 3.23, with the standard deviations in the range of 0.25 to 0.35. Because of the small and minimal standard deviations compared to mean values, it is evident that the data points are close to the means and hence calculated means highly represent the observed data. In effect, the calculated means are a true reflection of reality (Garson, 2000; Field, 2006, & Saunders et al., 2007). The mean value of financial performance (3.09) is the lowest in contrast to other means. This finding coincides with the earlier assertion about the poor performance of Microfinance institutions in Uganda.

**Table 2: Criterion Variables (Profitability)**

Profitability			
	Return on Asset(ROA)	Return on Equity(ROE)	Profit Margin
Mean	3.6540	16.9460	12.2280
Standard Deviation	.20082	.29263	1.56122
Sample Variance	.040	.086	2.437
Skewness	.466	-.274	1.472
Kurtosis	-2.284	-2.994	1.457
Count	32	32	32
p value	.000	.000	.000

**Source:** Primary data,

The findings reveal that, MFIs ability to generate return on capital employed is quite disparate and p value is significant. And it was further revealed that MFIs do not have similar debt equity ratios in the financing mix and the return on equity for these firms is not identical. The findings reveal that there are significant differences in the levels of return on equity, return on assets, and also in profit margin levels.

**Table 3: Criterion Variables (Financial Viability)**

Financial Viability			
	Operational Self Sufficiency	Financial Self Sufficiency	Debt/Equity
Mean	111.2000	114.4000	4.2600
Standard Deviation	7.04982	1.81659	.424
Sample Variance	49.700	3.300	.424
Skewness	-.091	.267	.918
Kurtosis	-2.834	1.074	-.387
Count	32	32	32
p value	.000	.000	.000

**Source:** Primary data,

The financing mix among the microfinance institutions varied widely with p value being significant. This has mainly emanated from increasing reliance of the institutions on funds being made available by donors and other funding agencies. Most of the firms are not yet dependent on equity as a source of funds in a big way.

**Table 4: Criterion Variables (Portfolio Quality)**

Portfolio Quality	Portfolio at Risk>30 days		Portfolio at Risk>90 days		Loan Loss rate	
	Mean	1.484		.9740		1.3060
Standard Deviation	.4867		.31548		.29619	
Sample Variance	.237		.100		.088	
Skewness	-.871		-2.229		-.422	
Kurtosis	-.395		4.975		-2.879	
Count			32		32	
p value	.000		.002		.001	

Source: Primary data, 2012

The findings reveal that, the p value is significant in case of potential future bad debts, provision for bad debts an indicator that the Microfinance institutions are operating with differing levels of risk appetite. This means that the risk avoidance in MFIs is different

**Table 5: Zero order correlation between Management Control, and Financial Performance**

	<i>Std.</i>		<i>Financial</i>			
	<i>Mean</i>	<i>Deviation</i>	<i>ICS</i>	<i>Budgeting</i>	<i>P.Measurement</i>	<i>Performance</i>
ICS	3.20	.28	1			
Budgeting	3.23	.36	.323**	1		
P.Measurement	3.21	.33	.499**	.131*	1	
Financial Performance	3.10	.25	.388**	.249**	.183**	1

\*\* Correlation is significant at the 0.01 level(2-tailed) \* Correlation is significant at the 0.05 level(2-tailed)

**Source:** Primary data

It is evident that there is a positive significant correlation between Budgeting and Internal control system ( $r = .323^{**}$ ,  $p < 0.05$ ). This finding means that Efficiency in budgeting is associated with greater structural control systems. Furthermore, the findings reveal that there is a positive and significant relationship between Internal control system and performance measurement exists ( $r = .499^{**}$ ,  $p < 0.05$ ). From correlation matrix the results indicate that the relationship between budgeting and performance measurement is not significant ( $r = .131^*$ ,  $p > 0.05$ ).

**Table 6: Correlation of MCS variable and Financial Performance**

		<i>ICS</i>	<i>Budgeting</i>	<i>Performance m</i>	<i>Financial performance</i>
ICS	Pearson Correlation	1	.323**	.499**	.388**
	Sig. (2-tailed)		.000	.000	.000
Budgeting	Pearson Correlation	.323**	1	.131*	.249**
	Sig. (2-tailed)	.000		.014	.000
P.Measurment	Pearson Correlation	.499**	.131*	1	.183**
	Sig. (2-tailed)	.000	.014		.001
Financial performance	Pearson Correlation	.388**	.249**	.183**	1
	Sig. (2-tailed)	.000	.000	.001	

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

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

**Source:** Primary

The findings revealed that appositve and significant relationship between internal control system and financial performance exist in Microfinance Institutions( $r = .388^{**}$   $p(.000) < 0.01$ ). This shows that a maintaining strong and efficient internal control system is highly associated with high financial performance in Microfinance Institutions. In a related case, the relationship between budgeting and financial performance is significant( $r = .249^{**}$ ,  $p(.000) < 0.01$ ). This implies that efficient budgeting systems are associated with higher performance levels in Microfinance Institutions. This is because the budget systems, and processes, in an institution can influence the institution’s level of efficiency and effectiveness, which are important to every institution’s

success. The findings, posit that there is a significant and positive effect of budgeting on financial performance

It is further evident that there is a significant and positive correlation between performance measurement and financial performance ( $r = .183^{**}$ ,  $p (.001) < 0.01$ ). This is a sign that a strong relationship exists between performance measurement and financial performance. This signifies that a higher Microfinance Institution’s performance measurement is associated with high performance levels.

**Table 7: Management control system & Financial Performance**

	Mean	Std. Deviation	Management Control System	Financial Performance
Management Control System	3.21	.25	1	
Financial Performance	3.10	.25	.335**	1

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

**Source:** Primary data

Results show a positive and significant relationship between management control system and financial performance. The findings further revealed that there is a strong significant relationship between the level of management control system and the degree of financial performance  $r = .335^{**}$  sig = 0.000 indicating a strong positive co-relation ( $r > 0$ ) which indeed was big since its sig value = 0.000  $< \alpha = 0.01$  leading to acceptance of the hypothesis to the effect that the level of management control system has a strong relationship with the degree of financial performance of microfinance institutions in Central region Uganda

**Model estimates**

The hypothesis was structured to ascertain the extent to which management control system can influence financial performance. This was expressed as:

$$Y = a + bx$$

$$FPM = f(MCS)$$

$$Y = \alpha_0 + \beta_1 ICS_1 + \beta_2 BDGT_2 + \beta_3 PFM_{3+4} + \mu \dots$$

**Where**

Y = Financial performance (proxied by Profitability, portfolio quality, financial viability)



Key predictor of Management control system is given as

ICS<sub>1</sub> = Internal control System, BDGT<sub>2</sub> = Budgeting, PFM<sub>3</sub> = Performance Measurement

**Table 8: Model Summary and estimates of the Variables**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.524 <sup>a</sup>	.275	.269	.17763

a. Predictors: (Constant), P.Measurement, Budgeting, Internal control system

**Table 9: Hierarchical regression with Management control system elements on financial performance**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.499 <sup>a</sup>	.249	.247	.18025
2	.522 <sup>b</sup>	.272	.268	.17771
3	.524 <sup>c</sup>	.275	.269	.17763

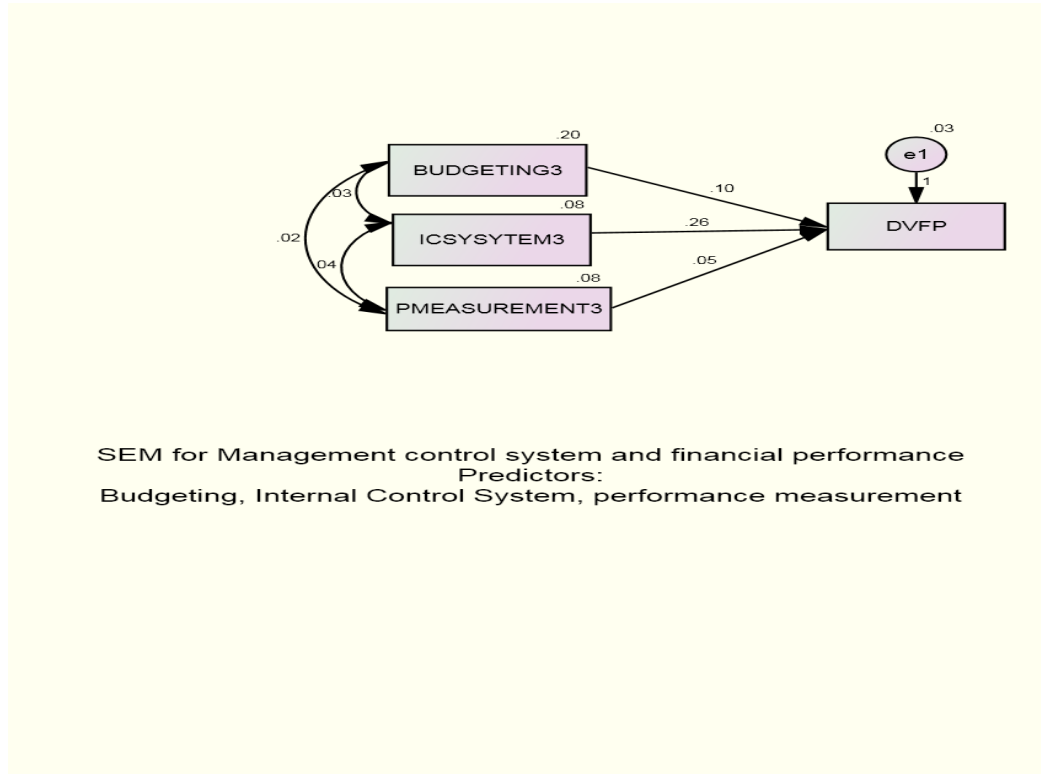
a. Predictors: (Constant), Internal Control System

b. Predictors: (Constant), Internal Control System, Budgeting

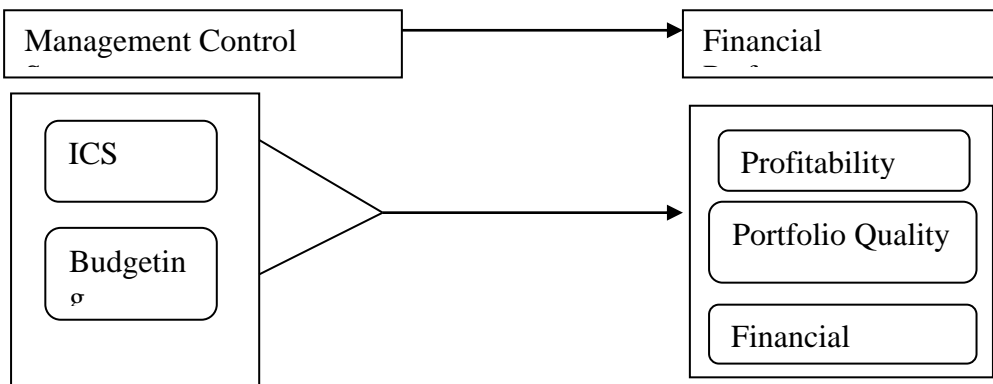
c. Predictors: (Constant), Internal Control System, Budgeting, Performance measurement

In the Model, the findings revealed that, internal control system accounted for 24.9 % of variance in financial performance that caused a statistically-significant standardized coefficient (B =0.381, P <0.01); In Model 2, the introduction of budgeting in the equation yielded 27% to the explanatory power of the model. This implies that budgeting accounted for an additional 2% of the variance in financial performance and caused a statistically-significant coefficient (B =0.095, p<0.01) the inclusion of performance measurement, yielded an insignificant additional 0.3% to the explanatory power of the model. This finding means that performance measurement accounted for only 0.3% of the variance in financial performance and caused a statistically insignificant coefficient (B =0.045, p >0.05) This led to the development of structural equation model and a modified frame work respectively

**Figure 2: Structural equation model**



**Figure 3: Modified Conceptual model**



The study findings revealed that performance measurement was dropped from the modified frame work, since it caused a statistically insignificant contribution on Financial Performance of Microfinance Institutions, with coefficient (B =0.045, p >0.0

The findings indicate that microfinance institutions in central region Uganda are efficient in preparing budgets and receive budget targets, and it was revealed that budgeting provides basis for control and performance evaluation because budgets act as a benchmark against which the performance of microfinance institutions is measured. The findings further revealed that the purposes of the budget are not always communicated to the stake holders of the institution and yet it is necessary in an efficient organization that all people be informed about the objectives, policies, programs, performance and expectations of the organization. This is always made possible through their participation in budgeting process

It was further revealed that those microfinance institutions in central region Uganda are efficient in performance measurement in a way that, the microfinance institutions are very efficient in resource utilization, however it was discovered that much as good performance is always received on good performance, exceptional performance is not always recognized by the microfinance institutions in central region Uganda.

The findings further revealed that the microfinance institutions have a good and strong internal control system in that the institutions are very efficient in proper authorization for acquisitions. It was further discovered that much as most microfinance institutions in Uganda maintain debtors ledgers control accounts, they are sometimes not independently checked on a regular basis. Due to the high levels of management control system. This exhibited the existence of management control systems among the selected microfinance institutions in central region Uganda

The findings revealed that the microfinance institutions in Uganda have a weakness in charging interest on delinquent loans and yet loans and interest income are among the highest yielding assets of microfinance institutions because they provide the largest portion of operating revenue for most microfinance institutions in Uganda.

In terms of financial viability and portfolio quality, the findings revealed that the microfinance institutions have the ability to reach significant number of people in durable and stable manner and this shows that the microfinance institutions were highly successful in ensuring repayments although the delivery systems for loan recovery are not efficient and it was further revealed that still have challenge of not holding sufficient liquid assets to protect the institutions from liquidity distress.

Most microfinance institutions in Uganda have and apply management control systems. However Low levels of management controls were established in Microfinance Institutions. The weak and ineffective control system is attributed to lack of implementation and close monitoring of the system. Since performance measurement is at the centre of all the controls, its weak position, has equally affected the two adversely internal control system and Budgeting

It can be seen that since the three management control elements complement each other, their combination has translated into a weak overall management control system, which has, in turn, led to adverse effects in MFIs' financial performance in Uganda.

Since the three management control system elements complement each other, their combination has translated into a weak overall system, which has, in turn, led to adverse effects in MFIs'

financial performance. The adverse effect of weak management control system is manifested in increased operational inefficiencies that have resulted into increased operating costs and loan loss write-offs. More so, weak management control system has weakened the MFIs credit policy, which has, in turn, led to increased non-performing loans and portfolio at risk (PAR). Microfinance Institutions' poor performance is explained by weak performance measurement that has, in turn, affected internal control system and budgeting.

The study has addressed matters that have not been covered in the literature, more especially in the microfinance industry. The study has attempted to verify and affirm whether the theoretical assumptions are empirically supported in Microfinance Institutions. Consequently, the study has contributed to the management control debate in the field of microfinance industry in Uganda.

Though many researchers and scholars have different views on management control system elements, this study has ascertained that it is a multi-dimensional predictor encompassing management control system, budgeting and performance measurement. However, internal control system is crucial in enhancing the strength of other management control system elements. The study has, therefore, brought to light the true composition of management control system in Uganda's Microfinance Industry.

This study further established that management control system dimensions operate in a synergic way to affect financial performance in Microfinance Institutions in Uganda. However, internal control system is the most important predictor among the three management control system dimensions in explaining performance variance. Thus, the mixed results on the contribution of individual management control system elements to financial performance have been looked at in this study.

This study has introduced a clearer understanding of the extent to which management control system influence performance in Microfinance Institutions. This can promote management efforts of Microfinance Institutions to improve performance, which can be facilitated through the appropriate management systems of leading elements of management control system combination that can foster performance in Uganda's Microfinance Industry.

Finally, the empirical studies on the management control system in MFIs context are few in number, making this research area of special interest for exploration.

On the basis of the study findings, and reviewed literature, the following recommendations are pertinent to the success of Ugandan microfinance institutions.

MFIs should enhance controls that will ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives. And this will enhance the levels of management control system

MFIs should put a lot of emphasis on internal control system since it's a high contributor of financial performance. MFIs should hold sufficient liquid assets to protect the institutions from liquidity distress

Managers MFIs in Uganda have to continuously re-evaluate and try different new methods of measuring performance to manage performance better. These performance measurement practices require time to succeed and the institutions need to continually re-examine the system alignment, tracking and monitoring effectiveness and modifying the system to accommodate the changing needs

Microfinance institutions set and establish effective control systems: all of the financial, operational and other control systems which are carried out by internal controllers and which involve monitoring, independent evaluation and timely reporting to management levels systematically in order to ensure that all the institutions activities are performed by management levels in accordance with current policies, methods, instructions and limit

MFIs should pay more attention to the internal effects of performance measurement systems. These effects are namely directly affected through performance measurement and drive the organizations to external effects. MFIs, should establish portfolio monitoring and control system to improve and monitor the portfolio quality and this will improve financial performance. MFIs should find ways to reduce costs, increasing the number or size of loans disbursed, without compromising the loan portfolio, or reducing default rates

The Ministry of Finance and Economic Planning, Bank of Uganda, Microfinance support centre should provide a favorable platform for microfinance institutions to access financing that can enable them to set Interest rates that will not have a negative effect on the customer base. MFIs in Uganda charge relatively high interest rates this has led to lower repayment rates that negatively impacts on the institutions portfolio quality and profitability

The MFIs have to allocate more of their assets in to productive uses such as loans rather than current assets or fixed assets. MFIs should have a depth of outreach with clear market segmentation in order to improve on the sustainability the portfolio quality and the related loan loss provision. MFIs should enhance controls that will ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives. MFIs should put a lot of emphasis on internal control system since it's a high contributor of financial performance. MFIs should hold sufficient liquid assets to protect the institutions from liquidity distress

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