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The Impact of Microfinance Service Delivery on the Growth of SMEs in Uganda

By

Nahamya K. Wilfred[1], Ajanga Max, Omeke Michael, Nasinyama Moses and Tumwine Norman

Kyambogo University, Kampala, Uganda

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[1] Contact: wnahamya@yahoo.com

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List of abbreviations/acrynoms

AMFU	Association of Microfinance Institutions of Uganda
BDS	Business Development Services
DFCU	Development Finance Company of Uganda
COMESA	Common Market for East ans Southern Arfican Countries
CRB	Credit Reference Bureau
EADB	East African Development Bank
EIB	European Investment Bank
FAO	Food and Agriculture Organisations
ILO	International Labor Organization
LPM	Linear Probability Model
MDGs	Mellenium Development Goals
MFPED	Ministry of Finance Planning and Economic Development
MFIs	Microfinance Institutions
MSMEs	Medium Small and Micro Enterprises
NAADS	National Agriculture Advisory Services
NGOs	Non-government Organizations
OECD	Organization for Economic Coperation and Development
OLS	Ordinary Least Squares
PPP- Public	Private Partnership
SACCOs	Savings and Credit Cooperative Organisations
SMEs	Small and Medium Enterprises
USSIA	Uganda Small Scall Industrial Association
UBOS	Uganda Bureau of Statistics
USE	Uganda Stock Exchange

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Abstract

The major challenge facing many developing countries, especially in Africa, is devising appropriate development strategies that will capture the financial services requirements of Small and Medium Enterprises (SMEs) which constitute about 70 percent of the business sector. Delivery of microcredit to operators of Medium Small and Micro Enterprises (MSMEs) in developing countries is increasingly being viewed as a strategic means of assisting the working poor. Over the past decades, a considerable amount of multi- and bilateral aid has been channeled into microfinance programs in Uganda with varying degrees of success. Like all development interventions evaluations and impact assessment studies to ascertain the achievements and failures of these programs would help a lot for future program design. In Uganda, the SMEs sub-sector has realized tremendous growth in terms of employment, income and business stock size. The sub-sector has therefore attracted great attention of financial service providers to extend a range of financial offer to the poor. However, little is still known of the contribution of the microfinance industry to the growth of the SME sub-sector.

The study sought to establish the impact of microfinance service delivery on the growth of SMEs in eastern Uganda. The study employed both quantitative and qualitative data analytical methods, and a multiple regression was run to estimate the effect of socioeconomic characteristics on the SMEs growth, while a logit model was used to assess the constraints to access to microfinance products in Uganda. The findings indicate that although the MFIs have performed below a set standard on average due to some industry wide challenges, they have had a significant impact in linking SMEs and the poor to sources of credit and contributed to their growth in terms of growth of business capital and stock accumulation. It is recommended that there is need for an institutionalized public-private partnership for creating favorable conditions for the operations of these enterprises. This will reduce on the numerous constraints facing SMEs so as to make the nationals benefit from their overall contribution to poverty reduction. Designed tailored made products of SMEs are essential through investment in education, setting up an authority or coordination center for SMEs and promotion of prudential mechanisms by setting a regulatory and supervisory framework for all Microfinance Institutions.

Key Words: SMES, Growth, Microfinance, Financial and Non-Financial Services

1.0 Introduction

1.1 Background

The microfinance industry worldwide has been recognized as instrumental tool for poverty alleviation and economic growth. Therefore, socio-economic transformation efforts of low-income and poor community have been possible through accessing semi-formal and informal financial products/ services. The pivotal role of the microfinance has helped foster the growth and development of small and medium enterprise in the world by providing start-up and business expansion capital among other financial services. Microfinance institutions target the poor who are considered risky but the repayment rate turns to be positive as compared with the regular commercial banks (Zeller and Sharma, 1998).

Microfinance dates back to the 19th century when money lenders informally performed the role of now formal financial institutions. The informal financial institutions constitute; village banks, cooperative credit unions, state owned banks, and social venture capital funds to help the poor. These institutions provide savings and credit services for small and medium size enterprises. They mobilize rural savings and have simple and straight forward procedures that originate from local cultures and are easily understood by the population (Germidis et al., 1991). These funds are to finance the Small and Medium Enterprises (SMEs) in developing countries and it's known that these SMEs are more likely to fail (Maloney, 2003). The creation of SMEs generates employment but these enterprises may not survive longer and consequently are bound to die after a short while, causing those who gained job positions to lose them and even go poorer than they were.

Hanohan (2004) alludes that a well-functioning financial system is linked to faster and equitable growth. He argues that access to finance by the poor and small enterprises from formal and informal sources is a prerequisite for poverty reduction and social cohesion. Hence, access to finance has become an integral part of efforts to promote inclusive growth and empowerment of the vulnerable groups. Therefore, financial inclusion in any development sector leads to high levels of socio-economic development and ultimately reduces the poverty levels in an economy. Atiur (2009), however, states that financial inclusion is a tool for combating poverty and a key element of social inclusion making people to contribute to, and to benefit from the process of social and economic advancement. Through increased access to savings accounts and other financial services, the poor can build financial security, manage risks against adverse shocks and even invest in new business opportunities. Hence, financial inclusion is essential for inclusive growth, which is necessary for sustainable overall economic growth.

Chibba (2009) emphasizes the importance of financial inclusion especially from semi-formal financial institutions by stating that although the chosen and conventional approaches to tackle poverty and Millennium Development Goals (MDGs) are useful and necessary, they are not sufficient to address the human development challenges. Financial inclusion offers incremental

and complementary solutions to tackle poverty, to promote inclusive development and to address the Millennium Development Goals.

In addition, Microfinance gives people new opportunities by helping them to get and secure finances so as to equalize the chances and make them responsible for their own future. It broadens the horizons and thus plays both economic and social roles by improving the living conditions of the people (Mwaniki, 2006). These improvements are in a nutshell to alleviate poverty, boost production and according to this project, it will be seen from the point of the development of small and medium size enterprises (SMEs) and focusing mostly in the rural areas of Uganda. The UN millennium goal to alleviate poverty by the year 2015 is far-fetched despite the enormous works that microfinance institutions are doing to contribute in this domain (Hiderink and Kok, 2009). The main challenge facing the poor is to gain financial power to enable them boost their income generating activities (Yunus, 2003).

Small and medium enterprises (SMEs) play a major role in economic development in every country, including African countries. Studies indicate that in both advanced economies and developing countries SMEs contribute on average of 60 percent of total formal employment in the manufacturing sector (Ayyagari et al, 2007). The authors argue that for African economies, the contribution of the SME sector to job opportunities is even more important. Taking into account the contribution of the informal sector, SMEs account for about three-quarters of total employment in the manufacturing sector.

According UBOS (2010) during the Microfinance Census 2010, the total number of functional SACCOs in Uganda is 2,063. Of these, Government has since 2008 enabled establishment of 1085 SACCOs in the same number of sub counties under the policy of one SACCO per Sub County. Before the recent increment in the number of districts from 80 to 112, the programs targeted 1085 sub counties. Of these, the program is supporting 735 SACCOs and Cooperative groups with capacity building grants. This represents 64 percent of the sub counties covered. The 735 SACCOs under the government support have mobilized total membership of 841,312 people, with over 28 billion Uganda Shillings in Savings, Loan Portfolio of 44.4 billion Uganda Shillings and share capital of 16.3 billion Uganda shillings.

Microfinance Institutions in Uganda consist of moneylenders, micro-finance agencies, Non-Government Organizations (NGOs), rural farmers' schemes and savings societies that provide savings and/or credit facilities to micro and small-scale business people who have experienced difficulties in obtaining such services from the formal financial institutions. Their range of activities include; deposit taking, savings schemes, small-scale enterprises, agriculture, real estate, group lending, retail financial services, giving advice on financial matters and training in business management. For developing countries, small-scale enterprises would generally mean enterprises with less than 50 workers and medium size enterprises would usually mean those that have 50-99 workers. In Uganda, a small-scale enterprise is an enterprise or a firm employing at least 5 but with a maximum of 50 employees, with the value of assets, excluding land, building

and working capital of less than Uganda Shillings 50 million (US$ 30,000), and the annual income turnover of between Uganda Shillings 10-50 million (US$6,000-30,000). A Medium sized enterprise is considered a firm, which employs between 50-100 workers.

Unfortunately for Uganda, the financial system is small and with minimal linkage to the real economy. Uganda's saving/GDP ratio is about 12 percent including both private and public sector savings compared to the continental average of 17.7 percent. The ratio of money supply to GDP is only 12 percent. There is only one bank branch per 180,000 people in Uganda, compared to an average of 7,000 per bank branch in the Common Market for East and Southern Africa (COMESA) countries. Moreover, bank branches are concentrated in the urban centers. Out of 123 branches, 64 are found in the 4 largest urban areas.

The majority of the MFIs in Uganda provide two main categories of financial products; credit and savings. These services are categorized further by terms and size of loans and Type of deposits. The survey established an estimated loan portfolio of Uganda Shillings 97 billion (or US$ 53.3 million) with an average loan size of Uganda Shillings 283, 266 (or US$ 161). With regard to the volume of savings, the survey established the existence of 909,272 active savers in MFIs countrywide with a total savings volume of Uganda Shillings 107 billion (or US$ 61 million). Therefore, the impact study on SME growth as result of microfinance service delivery was geared towards establishing whether the microfinance service delivery bridges the SMEs growth gap in Uganda.

1.2 Problem Statement

Microfinance industry has become increasingly important world over as a major strategy in the development agenda for poverty reduction and in the promotion of Small and Medium Enterprises. The industry is seen as paramount in augmenting private sector-led growth through supporting the SME sector. The MFI's resource base can provide a platform for the growth of SMEs, and contribute to the fight against poverty. Some studies (Holcombe, 1995, Otero and Rhyne, 1994) argue that microfinance has indeed many positive impacts.

In Uganda, the microfinance industry is playing a critical role in providing a range of financial and non-financial services to both urban and rural communities. The services are through the products such as, loans, deposits taking, savings, micro-insurance, money transfer services, financial education and wide spectrum of cross-cutting issues like fight against HIV/AIDS and environmental education. The provision of such services is expected to contribute to the growth of SMEs in terms of business capital, stock accumulation and increase in employment levels to improve household incomes. However, there is no adequate empirical evidence available to vindicate the contribution of microfinance service delivery in bridging the growth gap of SMEs. This study therefore was geared towards establishing the impact of Microfinance service delivery on the growth of SMEs in Uganda.

1.3 Main Objective

The purpose of the study was to establish the impact of microfinance service delivery on the growth of SMEs in Uganda.

1.4 Specific Objectives

The objectives of the study were to:

(i) Establish the extent to which microfinance services affect SMEs business capital and stock accumulation.
(ii) Examine the extent to which microfinance services affect employment growth through MFIs non financial services.
(iii) Establish the influence of socio economic characteristics on growth of SMEs.
(iv) Establish the constraints to SMEs access to microfinance services.

1.5 Scope of the Study

The impact study was conducted in eight selected districts in the eastern region of Uganda. The conceptual scope of the study was defined by concentrating on the impact of microfinance services on SMEs growth in terms of capital, stock accumulation and employment growth. However, other factors and constraints that affect SME growth were also captured in the study.

1.6 The Hypotheses of the Study

The following pre-determined assumptions guided the study;

(i) Microfinance financial services positively affect SMEs business capital and stock accumulation.
(ii) Microfinance non-financial services positively affect SMEs employment growth.
(iii)The growth of SMEs is significantly affected by their socio-economic characteristics.
(iv)There SMEs face a number of constraints in accessing microfinance services.

1.7 The Significance of the study

The study findings can help in guiding formulation of policies and strategies to facilitate the growth of SMEs. It will help MFIs design and refine their range of products tailored to the needs and demands of SMEs. Policy makers are always interested in quantifying program outcomes and thus such impact study will help future program design of microfinance institutions in the provision of services to SMEs.

2.0 Review of theoretical and empirical Literature

2.1 Introduction

The related literature documents relationship between microfinance industry and SME growth. Identification and analysis of theoretical gaps and consolidation of facts in relation to the study was done.

2.2 Small and Medium Enterprises Growth

The aim or goal of any firm is to make profits and later grow or expand its operation. A firm is defined as an administrative organization whose legal entity or frame work may expand in time with the collection of both physical resources, tangible or resources that are human in nature. Penrose, (1995) define the concept of the firm in terms of an increase in size or other objects that can be quantified or a process of changes or improvements. The firm size is the result of firm growth over a period of time and it should be noted that firm growth is a process while firm size is a state. The growth of a firm can be determined by supply of capital, labor and appropriate management and opportunities for investments that are profitable. Various arguments have been presented about the types of support that should be used to develop the SMEs sector. Two basic arguments have emerged i) market forces and; ii) an intervention approach. Cook (2000) indicated that the first argument is based on the position to rely principally on market forces. Underlying this approach is the notion that previous policies pursued in developing countries have led to a bias in favor of the development of larger-scale enterprises. Much of the support that was developed for small-scale industry was of a direct kind and at the micro level involving forms of managerial and technical support through training, credit provisions and a range of site and service facilities. Later this was replaced by structural adjustment policies aimed directly at removing the so-called market distortions to create a level playing field in which enterprises of all sizes will have equal access to resources. It was argued that a market-based approach would reduce the scope for arbitrary decision-making and lessen the opportunity for privileged access to resources through bribery and patronage.

The second approach has been associated with the structuralist school of thought: this argues pro-actively for the continuance of forms of intervention to assist small enterprise development. The general difference between the two approaches is not in questioning the importance of the appropriate macroeconomic environment for small-scale development, but in the nature of the types of changes that are required to bring about improvements. The infant industry argument underlies the second approach and envisages forms of intervention that are unacceptable to the first. According to (Ghoshall et al 2001), the consensus in the structuralist approach retains the need to improve the overall policy environment for small-scale industry and, in particular, to remove the bias toward large-scale industry.

Efforts to support small businesses in developing countries are not new and the reasons and the type of support have changed over time. Cook, (2000) indicates that earlier support mechanisms centred on direct assistance program are usually initiated by state or parastatal agencies.

However, most of the earlier attempts to shape their institutional environments for small scale enterprises were largely divorced from general industrialization policies laid down in development plans. In recent decades a more complex picture of the extent, range and underlying rationale for support mechanisms has emerged. Apart from ongoing support to small enterprises, set in place to mitigate the constraining operational environment that has historically developed, those designed to cushion any adverse effects, or conversely, to reap the benefits of adjustment measures, a newer focus for support is currently being emphasized. He further argues that evidence is emerging of a trend towards the development of a multi-layered network of support ranging from government policies to microfinance interventions by non-governmental organizations.

The determining factor for a firm's growth is the availability of resources to the firm enterprise development services or business development services or nonfinancial services are provided by some MFIs adopting the integrated approach. The services provided by nonfinancial MFI services are; marketing and technology services, business training, production training and subsector analysis and interventions (Ledgerwood, 1999). Enterprise development services can be sorted out into two categories. The first is enterprise formation which is the offering of training to persons to acquire skills in a specific sector such as weaving as well as persons who want to start up their own business. The second category of enterprise development service rendered to its clients is the enterprise transformation program which is the provision of technical assistance, training and technology in order to enable existing SMEs to advance in terms of production and marketing. Enterprise development services are not a prerequisite for obtaining financial services and they are not offered free of charge. These charges are subsidized by the government or an external party since to recover the full cost in providing the services will be impossible by the MFI. The enterprise development services may be very meaningful to businesses but the impact and knowledge that is gained cannot be measured since it does not usually involve any quantifiable commodity. Ledgerwood (1999) argues further that there is little or no difference between enterprises which receive credit alone and those that receive both credit packages and integrated enterprise development services.

O'farell and Hitchens (1988) classify available business growth theories into four main groups: Most static equilibrium theories derived from the field of industrial economics state that there are mainly concerned with attainment of economies of scale and minimization of long-run unit costs; stochastic models of firm growth which in summary Suggest that "many factors affect growth" and that there is therefore no dominant theory. Strategic management perspectives on SME growth which have "focused attention upon the strategic dimension of achieving sustained growth and the way in which the owner-manager responds to business and personal environmental indicators. Theories according to which SME growth is viewed as a series of phases or stages of development through which the business may pass in an enterprise life-cycle.

Schmitt-Degenhardt, et al (2002), study introduces different established enterprise growth theories, focusing on static and dynamic concepts and internal and external reasons for SME

growth. Static approaches consider "locally oriented SMEs" whose development strategy is limited to a certain area and is therefore a limit to its size, "arrested development" where the owner manager chooses to maintain the company size limited, the "life-style firm" which is just large enough to guarantee the owner-manager a quality of life, and the argument of formalization as an obstacle to further business growth. Dynamic approaches considerably make use of the biological metaphor of the "life-cycle" wherein enterprises are born, grow, and decline. The corresponding growth phases can be labeled "Start-Up", "Expansion", "Maturity Stage" and "Diversification Stage". Within these growth stages, it is said, there can occur "disengagement stages". Analyzing both approaches the study concludes that neither one can give a satisfactory explanation for the observed growth gap. A different life-cycle model by Steinmetz however gives a promising explanation, focusing on strategic management aspects. The first phase of "direct supervision" "is followed by the stages of „supervised supervision", "indirect control" and "divisional organization". The growth gap seems to stem mainly from critical management conditions and conflictive internal relations that may lead to a serious growth slowdown or a crisis that may even threaten the further existence of the company.

2.3 MFIs' products, services, cost of lending and SME Growth

The institutional framework within which firms, in this case SMEs, interact with MFIs, government, NGOs and other service providers, and each other, can have a profound influence on a SMEs economic and noneconomic performance. Mnenwa and Maliti (2009) report that education, motivation, sources of initial capital and technology are some of the socio-economic factors that have a positive influence on profit margins and employment creation. The potential and ability of small businesses to contribute to poverty reduction objectives are largely vested in the capacity of the SME institutions to provide the needed education, incentives, employment and capital.

Babajide (2007) argued that MFIs can offer their clients who are mostly the men and women who could be below or slightly above the poverty line a variety of products and services. The most prominent of their services is financial. This they often render to their clients without tangible assets as collateral security. These clients mostly live in the rural areas and a majority of whom are illiterate. Formal financial institutions do not often provide these services to small informal businesses run by the poor as profitable investments. They usually ask for small loans and the financial institutions find it difficult to get information from them either because they are illiterates and cannot express themselves or because of the difficulties to access their collateral (farms) due to distance. It is by this that the cost to lend a dollar will be very high and also there is no tangible security for the loan. The high lending cost is explained by the transaction cost theory. The transaction cost can be conceptualized as a non-financial cost incurred in credit delivery by the borrower and the lender before, during and after the disbursement of loan. The cost incurred by the lender include; cost of searching for funds to loan, cost of designing credit contracts, cost of screening borrowers, assessing project feasibility, cost of scrutinizing loan

application, cost of providing credit training to staff and borrowers, and the cost of monitoring and putting into effect loan contracts.

On the other hand, the borrowers may incur cost ranging from cost associated in screening group member (group borrowing), cost of forming a group, cost of negotiating with the lender, cost of filling paper work, transportation to and from the financial institution, cost of time spent on project appraisal and cost of attending meetings (Christabell, 2009). The parties involved have the sole responsibility to reduce the risk they may come across. Microfinance comprise of financial sustainability, outreach to the poor, and institutional impact in a triangular manner. There are costs to be incurred when reaching out to the poor and most especially with small loans. The financial institutions always try to keep this cost as minimum as possible and when the poor are in a dispersed and vast geographical area, the cost of outreach increases. The provision of financial services to the poor is expensive and as argued by Adam and Pischke (1992) making financial institutions sustainable requires patience and attention to avoid excessive cost and risks.

The deliveries of MFIs products and services have transaction cost consequences in order to have greater outreach. Some microfinance institutions visit their clients instead of them to come to the institution thereby reducing the cost that clients may suffer from For MFIs to be sustainable, it is important for them to have break-even interest rates. This interest rates need to be much higher so that the financial institution's revenue can cover the total expenditure (Hulme and Mosley, 1996). Moreover, the break-even rate which is higher than the market rate is defined as the difference between the cost of supply and the cost of demand of the products and services. The loan interest rates are often subsidized (Robinson, 2003). He further notes that loans demanded by smaller enterprises are smaller than those requested by larger ones but the interest rates remain the same. This indicates that, per unit cost is high for MFIs targeting customers with very small loans and possessing small savings accounts. Even though the interest rate is high for applicants requesting very small loans, they are able to repay and even seek repeatedly for new loans. The social benefits that are gained by clients of MFIs supersede the high interest charged (Rosenberg, 1996). The high interest rate is also as a means to tackle the problem of adverse selection where a choice is made between risky and non-risky projects. This implies that the good clients suffer at the expense of the bad ones as noted by Babajide (2007).

Low-income men and women have a serious hindrance in gaining access to finance from formal financial institutions. Ordinary financial intermediation is not more often than not enough to help them participate, and therefore MFIs have to adopt tools to bridge the gaps created by poverty, gender, illiteracy and remoteness. The clients also need to be trained so as to have the skills for specific production and business management as well as better access to markets so as to make profitable use of the financial resource they receive (Bennett, 1994). In providing effective financial services to the poor requires social intermediation. The author argues that it is "the process of creating social capital as a support to sustainable financial intermediation with poor and disadvantaged groups or individuals". Some microfinance institutions provide services such

as skills training, marketing, bookkeeping, and production to develop enterprises. Social services such as health care, education and literacy training are also provided by some MFIs and both enterprise development and social services can improve the ability of the low-income earners to operate enterprises either directly or indirectly. This implies that the services provided to microfinance clients can be categorized into four major different categories: Financial intermediation, Social intermediation, Enterprise development services and Social services.

Accessing credit is considered to be an important factor in increasing the growth of Small and Medium Enterprises. It is thought that credit augment income levels, increases employment and thereby alleviate poverty. It is believed that access to credit enables poor people to overcome their liquidity constraints and undertake some investments such as the improvement of farm technology inputs thereby leading to an increase in agricultural production (Hiedhues, 1995). The main objective of microcredit according to Navajas et al, (2000) is to improve the welfare of the poor as a result of better access to small loans that are not offered by the formal financial institutions.

Diagne and Zeller (2001) argue that insufficient access to credit by the poor just below or just above the poverty line may have negative consequences for SMEs and overall welfare. Access to credit further increases SME.s risk-bearing abilities; improve risk-copying strategies and enables consumption smoothing overtime. With these arguments, microfinance is assumed to improve the welfare of the poor. It is argued that MFIs that are financially sustainable with high outreach have a greater livelihood and also have a positive impact on SME development because they guarantee sustainable access to credit by the poor (Rhyne and Otero, 1992).

Buckley (1997) argues that, the indicators of success of microcredit programs namely high repayment rate, outreach and financial sustainability do not take into consideration what impact it has on micro enterprise operations and only focusing on "microfinance evangelism". Carrying out research in three countries; Kenya, Malawi and Ghana, he came to the conclusion that there was little evidence to suggest that any significant and sustained impact of microfinance services on clients in terms of SME development, increased income flows or level of employment. The focus in this augment is that improvement to access to microfinance and market for the poor people was not sufficient unless the change or improvement is accompanied by changes in technology and or technique.

Zeller and Sharma (1998) argue that microfinance can aid in the improvement or establishment of family enterprise, potentially making the difference between alleviating poverty and economically secure life. On the other hand, Berger (1989) indicates that microfinance tends to stabilize rather than increase income and tends to preserve rather than to create jobs.

Findings by Coleman (1999) suggest that the village bank credit did not have any significant and physical asset accumulation. The women ended up in a vicious cycle of debt as they use the money from the village banks for consumption purposes and were forced to borrow from money lenders at high interest rate to repay the village bank loans so as to qualify for more loans. The

main observation from this study was that credit was not an effective tool to help the poor out of poverty or enhance their economic condition. It also concluded that the poor are too poor because of some other hindering factors such as lack of access to markets, price stocks, unequal land distribution but not lack of access to credit.

The study by Mosley and Hulme (1998) concludes that household income tends to increase at a decreasing rate as the income and asset position of the debtors is improved. Similar views are held by Diagne and Zeller (2001) who suggest that microfinance do not have any significant effect in household income meaning no effect on SME development. Investing in SME activities will have no effect in raising household income unless the infrastructure and market is developed. Some studies have also argued that using gender empowerment as an impact indicator of microcredit has a negative impact (Goetz and Gupta, 1994; Montgomery et al, 1996). Using a "managerial control" index as an indicator of women empowerment, it came to conclusion that the majority of women did not have control over loans taken by them when married yet it was the women who were the main target of the credit program. The management of the loans was made by the men hence not making the development objective of lending to the women to be met.

2.4 SMEs access limitations to MFIs services and its effect on growth

Formal financial institutions have failed to provide credit to the poor and most of whom are found in developing countries and to be more specific in the rural areas. The constraints facing SMEs are of two fold; the demand-based (SMEs) and supply-based (formal banks) financial constraints. The supply-side finance constraint is defined as a capital market imperfection that leads to a socially incorrect supply of funds to projects, or the incorrect interest rate charged on funds. The demand-side financial constraint is defined as a capital market imperfection in which performance of a firm is adversely affected by a factor internal to the firm. Thus for instance, if the firm's owners would like to grow the firm faster, but the only way they can do this is to relinquish equity, and they refuse to do so, it may be said that the firm's demand for funds is demand-constrained.

In a relatively poor country like Uganda, the cost of staying competitive can be enormous. Wangwe (1999) points out that the growth and development of SMEs is constrained by economics, poor infrastructure, poor technology, inadequate finance, and unfavorable legal framework, the impact of HIV/AIDS and inadequate market and social linkages. Technological issues two broad rationales are usually advanced for supporting small firm activities through the traditional technology policy methods. The first is the perceived market failure in the labor and technology markets, and the second is the incidence of weak or absent markets and institutions in developing countries. As most analysts agree, there is a pervasive market failure in developing countries, while widespread institutional in articulation exerts far greater impact on small, rather than large, producer.

Oyelaran-Oyeyinka (2006) indicates that MFIs weaknesses raise transaction costs, thereby constraining firms from taking the advantage of market opportunities, while market failures limit access to markets and innovation possibilities. He furthermore, argues that while SMEs growth and development remains central to the economic health of African countries, they lack the economies of scale advantage and the capabilities that are often internalized by large firms. The exposure of African industry to international competition from the late 1980s onward further revealed the structural fragility of the region's industrial system. The policy response to the internal resource scarcity of SMEs and competitive pressures had been for the public and private sectors to attempt to develop institutions and services to promote production within small firm.

Similarly Pischke (1992), gives many reasons for limited access to MFIs products and services. Microfinance institutions'' policies are practically not meant to favor the poor. The poor are financially illiterate and MFIs lack those skills to target these rural customers. In these areas, the population density is very low causing high transaction cost by the financial institutions since they need to move for long distances and that it takes time to meet the customers (Devereux and Hoddinott 1990). Small and Medium Enterprises in developing countries are considered to be too unstable by banks to invest in. Due to this instability, the MFIs consider SMEs to have high risk and the costs these MFIs suffer to monitor the activities of the SMEs are high. The poor management and accounting practices are hampering the ability of smaller enterprises to raise finance. This is coupled with the fact that small businesses are mostly owned by individuals whose personal lifestyle may have far reaching effects on the operations and sustainability of such businesses. As a consequence of the ownership structure, some of these businesses are unstable and may not guarantee returns in the long run. However, according to Kauffmann (2005), access to formal finance is poor because of the high risk of default among SMEs and due to inadequate financial facilities.

Some empirical studies (Hossain 1998; Bhattacharya, et al. 2000; and Sia 2003) identify that formal financial institutions are reluctant to lend to SMEs since investing in SME activities is considered by MFIs to be very risky. They find it risky in the sense that if invested in, and in an event of unfavorable business conditions, they have low financial power, assets, and easily go bankrupt. Similar views are shared by Meagher (1998) who argues that the cost of borrowing from MFIs is very high and this prevents SMEs to borrow from this institution but these costs to borrow are sometimes subsidized by the government. The collateral demanded by banks for a loan is based on fixed assets and which are very high in this hinders these businesses to acquire loans. They cannot afford these collaterals which include; estates, and other fixed assets valued usually at 200 percent of the loan (Meagher, 1998). Another major setback that prevents SMEs to get funding from external sources is the problem of information asymmetry. Moreover, the application process for a loan is long and difficult for SMEs to meet up with the demands as further argued by Hossain (1998). Microfinance institutions use cash flows and profitability to measure or to assess the worthiness of a business. This is a very expensive and, not a good method to measure the credit strength of rural Small and Medium Enterprises. Production and distribution in the rural areas is influenced by social factors that are often neglected by

enterprises in developing countries (Otero and Rhyne 1994). Agriculture dominates rural activities in developing countries and is dependent on the weather conditions for its output. An enterprise in this sector is considered risky because its outcome is undetermined.

Accessing finance has been identified as a key element for SMEs to succeed in their drive to build productive capacity, to compete, to create jobs and to contribute to poverty alleviation in developing countries. Without finance, SMEs cannot acquire or absorb new technologies nor can they expand to compete in global markets or even strike business linkages with larger firms (CGAP, 2006). The effect of microfinance services on the growth of SMEs need to be understood in terms of business capital and stock growth.

2.5 Other Sources of Financing SMEs

The deficient financing to SMEs arising from discussions above, led us to exploring other alternative financial sources for SMEs. Although the banking sector is the largest and most important source of external financing for SMEs, by and large, it is believed to be under-serving the needs of this sector. SMEs alternatively draw financing from a variety of sources. According to OECD (2006), small firms rely proportionally more on non-bank sources of financing such as internal funds (savings, retained earnings, family network) and the informal sector (money lender), as a result of their inability to produce the collateral requested by commercial banks. The informal sector is the main channel of credit for SMEs in Uganda and the sector channeled funds up to 70-80 percent to SMEs in Viet Nam compared to 20-30 percent funded by formal channel. Also in Cambodia and Lao PDR, family and friends were said to be the main channel of funding because they provided the cheapest funds compared to either banks or money lenders. The latter which were not licensed entities charge exorbitant rate of up to 20 per cent monthly for unsecured loans. In Uganda, it is common practice for small business owners to organize themselves into cooperatives commonly called "SACCOs". Members of a SACCO would generally contribute a fixed amount daily, weekly or monthly, to be pooled and then collected in turns to fund their business or personal projects. However, this project will focus on formal and registered microfinance institutions' contribution to SME growth for easy analysis.

2.6 Small and Medium Enterprise and benefits to growth

MFPED (2008) report show that SMEs contribute greatly to the economies of all countries, regardless of their level of development. For instance, about 80 percent of the labor force in Japan and 50 percent of workers in Germany are employed in the SME sector. The SME sector has made a significant contribution to the gross domestic product of Uganda (20 percent), Kenya (19.5 percent) and Nigeria (24.5 percent). As far back as 2001, Uganda was estimated to have 1,069,848 enterprises classified as SMEs and forming 90 percent of Uganda's private sector. Small and Medium Enterprises employ approximately 1.5 million people equivalent to 90 percent of total non-farm private sector workers. Therefore, SMEs represent one of the most viable vehicles for sustainable grass root economic growth and the report notes on the need identify and mainstreaming support to this important sector to enable it to have a catalytic role in

the development process by creating jobs, reducing poverty, generating tax revenue and, above all, enhancing household incomes. There have been however interesting dynamics in the way the businesses employing more than 5 persons are growing within the regions during the past five years where in terms of legal ownership, the enterprises are predominantly sole proprietorships (52 percent) and private limited liability companies (24 percent). The report further indicate that the potential socio-economic benefits of SMEs are attributed to their capacity to achieve the following: create jobs at low investment cost, contribute significantly to the economy by increasing output of goods and services and improve linkages between economically, socially, and geographically diverse sectors. This was deemed to create opportunities for developing and adapting appropriate technology, provide an excellent breeding ground for entrepreneurial and managerial talent, develop a pool of skilled and semi-skilled workers, act as ancillaries to large-scale enterprises, adapt to market fluctuations and fill market niches which are not profitable for larger enterprises. This in turn will help SMEs lend themselves to development policies favoring decentralization and rural development and help alleviate the negative consequences of structural adjustment programs.

Empirical work on Microfinance (MFI) institutions and SMEs has shown that MF institutions are important for business growth in general and the development of SMEs in particular. A study by Mnenwa and Maliti (2005) shows that small businesses contributed to poverty alleviation through income generation in form of profits to entrepreneurs, salaries to workers and job creation. The authors argue that there is a correlation between firm size and the potential to increase income and employment creation, and that business performance in terms of profit generation and employment creation is positively related to the size of the firm, suggesting that strategies, which promote vertical growth, are more favorable than those favoring horizontal growth. Thus there is a link between the quality of institutions, and investment and growth.

Other empirical works have also shown that in many instances MFIs are inadequate in supporting SMEs growth and development. They assert that in most of the cases financial and non-financial framework for the promotion of SMEs is poorly coordinated (Wangwe 1999 and Kimuyu 2005). In addition some of small businesses are one-person operations and in developing countries there tends to be heavy reliance on the family unit as argued by Berger and Udel (1998). Bol (1995) classified non-traditional export firms in terms of a number of workers, and came with four groups of micro firms; Enterprises can be categorized as micro firms (less than ten workers), small firms (ten to fifty workers), medium firms (fifty to five hundred workers) and large firms (more than five hundred workers). JETRO (2011) define small and medium businesses as those with less than 250 employees, while Massawe (2000) suggests that small and medium businesses are those employing less than 250 persons. According to IFAD (2005), small enterprises are those engaging up to 49 people or employing capital of up to US$ 100,000 while medium enterprises have between 50 and 250 employees or capital of US$ 100,000 to US$ 200,000.

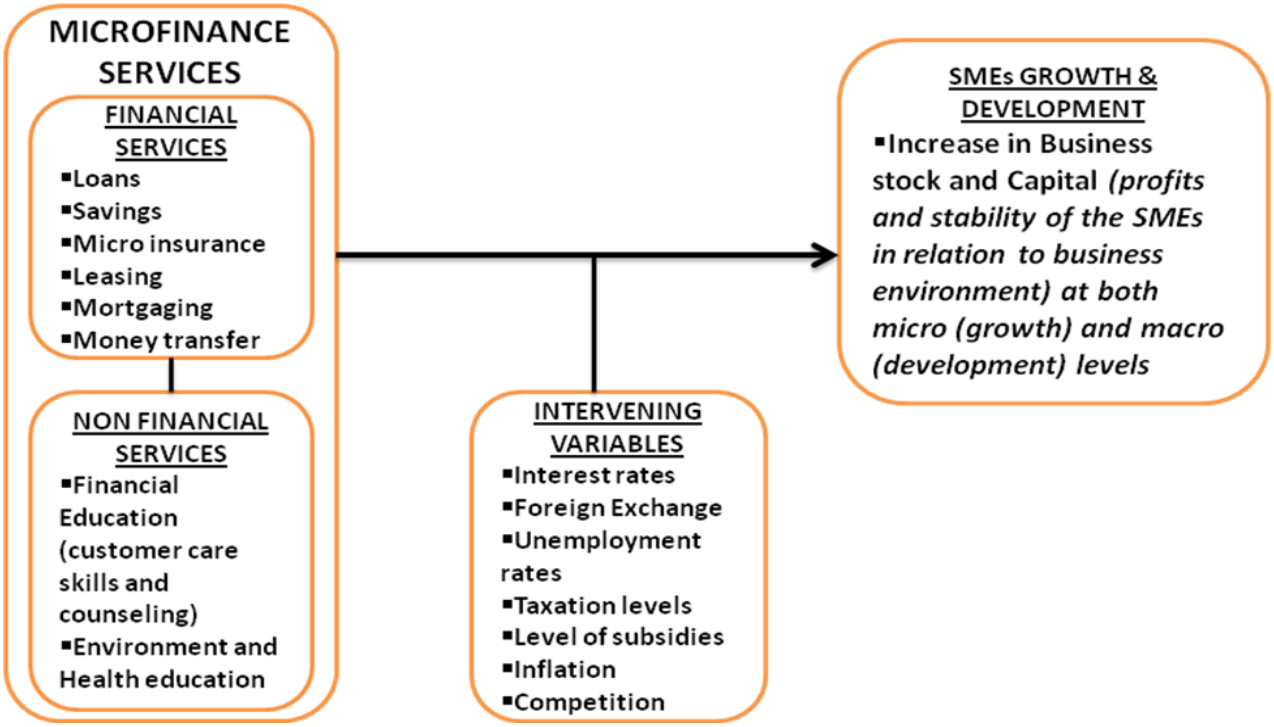
Kasekende and Opondo (2003) argue that SMEs in Uganda benefit from a number of alternative sources of financing. First, the Micro-financing industry has proved to be a reliable delivery vehicle for financial services to SMEs. They consist of licensed institutions, NGOs co - operatives as well as a large collection of associations ranging from women and youth clubs to loosely organized bodies. They offer savings, payments and insurance services to their clients. The strength of MFIs is that they serve the rural areas at low costs. Their service delivery is flexible, which makes it easy for weak SMEs to access financial services from them. Their weaknesses, though, lie in their weak operational and management information systems, poor internal controls, limited access to technical assistance, and dependence on donor funding. A centre has been set up at the Uganda Institute of Bankers to address the issue of capacity building of these MFIs. Secondly, lease financing as an alternative means of financing capital investment of SMEs with minimum initial outlay. In Uganda, the industry is still too small and young comprising only one leasing company. Thirdly, Venture Capital Financing involves the provision of investment finance to SMEs in the form of equity or quasi-equity instruments not traded on a recognized stock exchange. It is long- term risk finance whose primary return to the investor are capital gains rather than income. Fourthly, Equity financing, Uganda's capital market became fully fledged with the inception of the Uganda Stock Exchange (USE) in 1998. However, most SMEs cannot take advantage of the Exchange because of stringent listing rules regarding disclosure requirements, which require companies to provide credible information to investors. The banking sector has offered equity financing to a few successful SMEs. For example, SMEs such as UGACHICK LTD and Commercial microfinance Ltd have received equity financing from Messrs Development Finance Company of Uganda (DFCU), East African Development Bank (EADB) and the European Investment Bank (EIB). Fifthly, Financing through Mergers and acquisitions where we have no data pointing to Mergers and acquisitions being practised among the SMEs and finally, Credit Purchase Financing, although there is no official data on the magnitude of the credit purchase, this has been a very popular way in which SMEs have raised raw materials for processing. Those in retail business have benefited having to pay for stocks only after sales have taken place. This type of financing has depended largely on the trust and the reputation of the SMEs with their suppliers.

Based on the literature review, an enduring paradox in SMEs literature in Sub Saharan Africa illustrates that despite liberalization and other economic reforms in the formal financial sector, delivery of the financial services to the SMEs has remained inadequate. A second problem regarding the available literature is that much of it focuses on identification of the institutional constraints facing SMEs without assessing the capacity of the financial support institutions, requirements and delivery systems for their services. In addition there no adequate empirical literature of the impact of MFIs service delivery to the growth of SMEs. Generally there is a shortage of ideas on why the financial institutional framework for the promotion of SMEs is poorly coordinated, or what constraints SMEs institutions themselves face.

2.7 Conceptual Framework

The conceptual framework below clearly indicates that the microfinance industry provides a wide range of financial services (loans, savings, micro insurance, leasing, mortgaging and money transfer) and Non-financial services (advisory, references, training, counseling, social corporate responsibility, business culture and ethics, business customer care and business location), which services and products affect the growth of SMEs. The performance (growth) of the SMEs in Uganda could be spurred with the stable financial and non-financial services and products from the MFIs because of their outreach programs. Other intervening factors that impact on the growth of SMEs in Uganda include the levels of inflation, interest rates, and unemployment, taxation, competition and foreign exchange dealings. The presence and favorability of these factors could act as a catalyst in the growth of the SME sub sector and poverty reduction in Uganda.

Figure 1: Conceptual framework



The conceptual framework shows the relationship between MFIs services or products and business growth. With these financial and non-financial services, SMEs should be able to acquire loans to expand their business stock, acquire fixed and current assets, increase on profitability, widen their savings deposits for purposes of capital accumulation, create employment opportunities through business expansion and growth, improvement on business skills competencies and financial literacy through MFI financial education and counseling packages. However, there are other business environment factors outside the boundaries of the microfinance industry that influence the performance of SMEs. The micro business environment

factors include; location advantage, business experience, customer care and business ethical considerations. On the other hand, the macro business factors are; interest rate, exchange rate, inflation, and unemployment, fiscal and monetary policies. The growth and development of SMEs is dependent on the variation of the business environment factors on a positive or negative scale.

3.0 Methodology

3.1 Introduction

This section provides a detailed framework on how the study was conducted. The methodology stipulated the practical approaches and methods used in this research.

3.2 Research Design

Whereas the study design was mainly quantitative in nature, it was strengthened by some aspect of qualitative data. The quantitative data focused on SMEs business stock, capital and employment levels as influenced by MFIs financial and non-financial services. While qualitative information characterized opinionated and contextualized information obtained from key informant interviews.

3.3 Area of the Study

The study was conducted in the eastern region of Uganda. According to MFPED (2008), the country had 17,084 businesses. With 11,003 businesses allocated in central or Kampala region, 2,226 in eastern region, 1,297 in northern region and 2,558 in western region. Of 17,084 businesses, 33 percent were categorized as micro enterprises (i.e. employing between 0 and 4 Persons). The rest were categorized small and medium enterprises. Due to higher incidences of poverty (38.4 percent), the study focused on eastern Uganda. The region has 13 percent of the total SMEs in the whole country. The central region has 64 percent of the enterprises. It has 19.6 percent incidence of poverty and with a high number of commercial banks. This makes it not easy to isolate the impact of MFIs from the impact of other commercial banks' lending to the same businesses in the central region. The western region has the incidence of poverty of 19.3 percent while the northern region has 64 .8 (UBOS 2005). In addition MFIs have recently started in northern region because of the Kony insurgency war that has hit the region for the last twenty years. This made the eastern region the most viable for assessment of the impact of microfinance service delivery on the growth of SMEs.

3.4 Population of the Study

The key target population of study was SMEs manufacturing enterprises though other stakeholders like relevant government officials, MFI officials and local leaders were involved to obtain an in-depth understanding of the problem at hand.

3.5 Sampling Techniques

The study focused on eastern region in eight districts that were purposefully selected for the study and these included Jinja, Iganga, Kamuli, Tororo, Mbale, Soroti, Kumi, and Busia.

The selection of the respondent enterprises was based on the formula:

$$ss = \frac{Z^2 * (p) * (1-p)}{c^2}$$

Where SS is sample size for an unknown population, Z = Z value (e.g. 1.96 for 95% confidence level) p = percentage of picking an SME in eastern Uganda, expressed as decimal (0.87 used for sample size needed), c = confidence interval, expressed as decimal 0.04.

The above formula is corrected for finite population as:

$$\text{new ss} = \frac{ss}{1 + \frac{ss-1}{pop}}$$

With ss = 268 and pop=1491 then the number of enterprises that is, the sample size is 228. Percentages are got from Uganda business register 2006/07. Small and Medium Enterprises were randomly selected to minimize the bias. A combination of area, stratified and simple random sampling techniques were used to select the respondents for the study from the Small and Medium Enterprises. The key informants were selected using purposive sampling based on the position, roles and experience in managing Small and Medium Enterprises.

3.6 Data types, sources and Collection Instruments

The research used primary data. Both quantitative and qualitative data was collected through the use self-administered structured questionnaires were used for the SMEs and MFIs management.

3.7 Data Analysis

3.7.1 Model specification

The model for this study was divided according to the objectives of study. The first specification addresses the first two objectives and the other two were modeled as explained below.

3.7.1.1 Model of Effect of MFIs financial and non services on the SMEs' growth

To estimate the effects of MFIs financial and non-financial characteristics on the SMEs growth, the study adopted performance evaluation model with modification. The model was used by Leitao and Mario (2008) to estimate economic and non-economic performance of SMEs in Portugal. In this context, a multiple regression was performed, by making use of all the discrete variables available in the dataset. The estimation process based on Ordinary Least Squares (*OLS*), and a stepwise procedure was used for guaranteeing the detection and inclusion of the significant parameters. This model was expressed as;

$$\text{Entperf}_{\text{eco}} = \alpha_0 + \alpha_{11}BC + \alpha_{12}LenderC + \alpha_{13}loanC + \varepsilon_{1i} \text{ ----------1}$$

And

$$\text{Entperf}_{\text{noneco}} = \beta_0 + \beta_{11}BC + \beta_{12}LenderC + \beta_{13}loanC + u_{1i} \text{ ----------2}$$

Where, $\text{entperf}_{\text{noneco}}$ is measured by turnover of profits, returns on investment, or profits per employee, in a short run and in a long run by growth in revenues and growth in the number of employees. $\text{entperf}_{\text{eco}}$ is measured market share growth, BC- borrower's characteristics (age of business, business earnings, business capital, registered, net earnings, household capital), Lender C-lender's characteristics (branch location, company lending policy), and loan C- loan characteristics (purpose, amount, duration, cycle).

For the purpose of this study, we consider the model modification by taking dependent variable the enterprise economic performance (Entperf_{econ}) and replacing it with economic performance measures (growth of stock) in equation 1 and Entperf_{noneco} performance measures by replacing it with noneconomic performance measures (employment growth) in equation 2. Equations 1 and 2 above are therefore rewriten as follows;

$$\text{Stockg} = \alpha_0 + \alpha_{11}BC + \alpha_{12}LenderC + \alpha_{13}loanC + \varepsilon_{1i} \text{ ----------3}$$

And

$$\text{Empg} = \beta_0 + \beta_{11}BC + \beta_{12}LenderC + \beta_{13}loanC + u_{1i} \text{ ----------4}$$

Equations 3 and 4 address objectives one and two.

To assess the effect of socio economic characteristics on SMEs growth the influence of lender characteristics were analyzed against the growth of stock and employment levels.

3.7.1.2 Constraints to access to MFIs products and services

To assess the constraints on access to microfinance products in Uganda the study employed the logit model and the dependent variable in this model was the logarithm of odds that a particular

SME accessed a loan given its characteristics like stock size growth, capital growth, business skills of the managers, location of the business activity, and those of the MFIs like terms and conditions of loans, possibility of training and level of harshness of the recovery process.

The model analyzed the factors that influence the probability of SMEs acquiring a loan from a microfinance institution. The SMEs either acquired a loan or not. Loan acquisition was a yes or no response. Therefore, the response variable took on two values, namely, 1 if a loan was received from a microfinance institution, 0 otherwise. In other words, the response variable is a binary or dichotomous. The value of the response variable was interpreted as a probability that a given SME fulfilling certain criteria acquired a loan. The study of qualitative response models involves several approaches namely, the linear probability model (LPM); the logit model and the probit model. The fact that the LPM is plagued by several problems namely; non-normality of the error term, heteroscedaticity of the error term, possibility of the estimated dependent variables lying outside the 0-1 range and the generally low values of coefficients of determination as argued by Gujarati (2003). The study used the logit models as remedial alternative to the problems of Linear Probability Model. The logit model represented a cumulative logistic distribution function and it was used as a choice model to analyze the factors that influence the probability of SMEs acquiring a loan from a microfinance institution.
The Logit model is specified as follow;

$$P_i = E(Y = 1/X_i) = \frac{1}{1+e^{-(\beta_1+\beta_2 X_i)}}$$

Transforming the above equation yields the following linear model

$$L_i = In\left(\frac{P_i}{1-P_i}\right) = \beta_1 + \beta_2 X_i$$

Where L, the log of odds ratio; P_i is the probability of receiving a loan by SME and X_i represents the attribute of the ith Small and Medium Enterprises.

3.7.2 Reliability tests

Reliability of items was tested using Cronbach's alpha coefficients. Cronbach's alpha provides a measure of the extent to which the items on a quetionnaire, each of which could be thought of as a mini-test and provide consistent information with regard to respondents' mastery of the domain. In this way, Cronbach's alpha is often considered a measure of item homogeneity; that is large alpha values indicate that the items are tapping a common domain. The formula for Cronbach's alpha is as follows:

$$\hat{\alpha} = \frac{k}{k-1}\left(1 - \frac{\sum_{i=1}^{k} p_i(1-p_i)}{\hat{\sigma}_x^2}\right)$$

Where; *k* is the number of items on the questionnaire; p_i referred to as the item difficulty, $\hat{\alpha}$ is the proportion of interviewees who answered item *i* correctly; and $\hat{\sigma}_x^2$ is the sample variance for the total score.

3.8 Description of variables

The variables are grouped in three main categories: borrower, loan and lender characteristics. The table below presents all variables within each category and a description of each variable.

Table 1: Description of Variables

Borrower Characteristics	
Age of business (Ag)	Business experience of applicant in years. More experience is expected to have an increasing effect on capital and stock growth as this would indicate more stability.
Size of Business earnings (Sbe)	Estimated by loan officer (LO) as net earnings of business in Uganda Shillings (UGX) on a monthly basis if loan would be disbursed. Higher net earnings are expected to have a positive effect on capital and stock growth
Business Capital (Buc)	Estimate by LO as value of applicant's business in UGX (total assets - debt).
Business Register (Br)	Specifies if applicant business is officially registered. Yes is expected to have an increasing effect on growth, savings as this generally indicates more stability. Dummy, 1 if registered 0 otherwise
Total output (Top)	In Ugandan shillings. Positively related to size
Type of SME (Tos)	Dummy; 1 if manufacturing SME, 0 otherwise
Ownership (Ow)	Dummy; 1 if sole proprietorship, 0 otherwise
Type of colateral (tc)	The collaterals considered are; Land, car log book; buildings.
Other Debt (Otd)	Estimate by LO of size of other loans (in UGX) taken up by applicant. As other loans reduce room for growth and savings this variable is expected to have a negative effect on capital growth.
Loan Characteristics	
Loan adequacy (La)	It shows whether the amount of the loan borrowed was adequate .Dummy variable 1 if adequate, 0 otherwise.
Amount (Amt)	The amount of capital that was borrowed. As the incentive to invest increases for bigger loans(Measured in Uganda shillings)
Requested Duration (Red)	Describes Loan repayment period. A longer duration is expected to signal insufficiency and is associated with higher uncertainty about future solvability, causing a positive effect to growth and savings.(measured in years)
Cycles or repayment history(Crp)	Dummy; 1 if previously has not defaulted and 0; otherwise
Interest (i)	Interest rate on borrowed funds (%)
Loan frequency (f)	The number of times SMEs have borrowed the loan
Time(t)	Time it takes to process the loan (measured in weeks).
Lender Characteristics	
MFI location (Mfl)	Indicates branch in which loan application was filled. Dummy; 1 if Rurally, 0 otherwise.
Company lending policies (CLp)	Group or individual lending, as group lending has positive effect to growth and savings due to peer influence. Dummy; 1 if group lending; 0 otherwise

4.0 Presentation and discussion of Results

4.1 Introduction

One of the Objectives of this research is to analyze the importance of Microfinance services on capital and Stock accumulation. Small and medium enterprise development and growth have been a focus for policy makers in the developed and developing world. The study focused on the manufacturing and value addition of SMEs in eastern Uganda that have borrowed from MFIs for whatever activities of their choice.

4.2 Data set and characteristics of SMEs

A dataset of Manufacturing SMEs in Eastern Uganda was constructed, through the prior administration of a questionnaire to a sample of 228 SMEs that were proposed, during the period from March to June 2012 with a commendable response rate. The selection criteria were: (i) activity sector; and (ii) dimension (i.e. the number of employees). SMEs involved included those that are engaged in furniture processing, metal works and fabrications, grinding mills, bakery firms and shoe (leather) making firms.

Taking into consideration the literature review and the conceptual model, for measuring SMEs' growth, economic and non-economic measures were used. In terms of the dependent variables related to growth in capital and stock accumulation, the totality of the measures that were used was assessed by using items that required the entrepreneurs (SMEs owners) to evaluate the performance of their SME, in terms of change in level of output after benefiting from MFIs' activities. To quantify the dependent variable (s), quantity per month before and after the MFI service was asked and recorded in Uganda shillings. The set of independent variables were generated according to the available information on the dataset. The change in the level of output was explained by; the adequacy of the amount of capital borrowed, the length of loan repayment period, the interest paid on loan, the number of times the SME has ever borrowed, the type of Collateral security attached, and the length of time it takes to process the loan; implying that the questionnaire had eight independent variables to explain the growth of SMEs after benefiting from MFIs' service.

Regarding the firm's characteristics, all SMEs firms were located in town centers. Of these, the SMEs owned by persons whose highest educational attainment was primary had 57.9 percent chance of borrowing a loan, 88.3 percent for those with secondary education, 50.9 percent for tertiary and only 31percent for University graduates. The percentage of those who used the borrowed funds for buying raw materials was 91 percent and 89 percent used the loan to secure equipment while 34 percent used it for meeting operational costs. All SMEs that presented land as collateral got the loan they wanted but only 19 percent and 41 percent of those who presented car log books and buildings, respectively as collateral got the loans. If chance to borrow again was granted to the SMEs, 39 percent stated that they would borrow for new business venture, 23.3 percent would borrow to address emergencies and every SME stated that it would borrow

again to expand on the business. The characteristics also showed that 38.5 percent of the SMEs have ever defaulted.

4.3 Model estimation results

4.3.1 Model

In the estimation process, multiple regressions were performed by selecting the stepwise method, which provides, on a more accurate basis, the identification of the variables' estimators. The results for colinearity statistics, heteroscedasticity and Cronbach's alpha reliability tests (Appendix 1) are also provided. For objective one the model reliability of items alpha coefficient is 0.6256, for objective two it is 0.5934 and for objective three its 0.6147. The reliability tests show that items used in the questionnaire are over 50 percent consistent in gathering the data used in this study.

In the estimation process, multiple regressions were performed by selecting the stepwise method, which provides, on a more accurate basis, the identification of the variables' estimators. The results for colinearity statistics are also provided. In this context, a multiple regression is performed, by making use of all the discrete variables available in the dataset. The estimation process is based on Ordinary Least Squares (*OLS*), and a stepwise procedure is used for guaranteeing the detection and inclusion of the significant parameters. For this purpose, the researchers considered the following model specifications, by taking as dependent variables: the change in the level of output (measured as a difference between output before and output after the MFI product. This was expressed as;

Stockg = Q(Amt, La, Red,i,f, tc, t) ----------*1*

Where,

Stockg = is growth in stock or output level which was measured as the difference between the output before and out after the MFIs' product.

The table below shows the results of pair wise correlations

Table 2: Correlation results

Variable	amount borrowed	adequacy	repayment period	interest rate	No. of times	Type of collateral	Time to process
funds borrowed	1						
adequacy of loan	-0.0215	1					
loan repayment period	0.2401*	0.1385	1				
interest rate	1241	-0.1224	0.0015	1			
no of times	0.0735	-0.0688	0.04	-0.0916	1		
type of collateral	0.0076	0.0679	-0.0712	-0.0579	0.1291	1	
time taken to process the loan	0.0622	-0.1353	0.0834	0.1135	-0.148	-0.097	1

It can be seen that there is a significant correlation between the amount of business capital that is borrowed from the MFIs and the loan repayment period. The implication is that when OLS was run only one of these variables was used but not both to avoid collinearity. As stated earlier, one of the measurements of growth in SMEs is the rate of stock accumulation. For this study stock accumulation was obtained by getting the difference between the size of stock before the loan and the size of the stock after the loan.

4.4 Microfinance services and SMEs business capital and stock growth

Table 3: MFIs Services and SMEs Stock Growth

	Model 1			**Model 2**		
	coeff	**Std err**	**T**	**Coef**	**Std err**	**t**
Amount of capital that was borrowed	1.4146***	0.2273	6.22	-	-	-
Adequacy of the borrowed amount	0.2042	3.2977	0.06	0.1750	3.5990	0.05
Loan repayment period	-	-	-	-1.6104	2.8098	-0.57
Interest rate paid	0.0174	0.2661	0.07	0.2597	0.2837	0.92
Number of times SME has ever borrowed	0.0898	2.0146	0.04	1.3308	2.1663	0.61
Type of collateral (car log book)	-0.6484	8.4901	-0.08	2.5254	9.1277	0.28
Type of collateral (building)	-1.9797	4.5031	-0.44	-2.4707	4.8481	-0.51
Time it takes to process the loan	-0.3159	1.1067	-0.29	-0.0274	1.1971	-0.02
_cons	2.2705	8.5495	0.27	0.3871	9.5288	0.04
Number of observations	250			250		
F(8, 241)	5.09			0.26		
Prob.>F	0.0000			0.9788		
R^2	0.1446			0.0085		
Adj R^2	0.1162			-0.0245		

Table 3 above shows the regression results for equation one above, which associates SMEs growth in stock (stockg) with MFIs activities. Since the amount of capital that was borrowed by SMEs and the length of repayment period are significantly correlated (at 1 percent level of significance), they are included in the equation one at a time. The table shows that both models explain approximately 14.5 percent and 0.8 percent of stock accumulation of the SMEs in eastern Uganda.

The results in model 1 shows that the growth of stock accumulation is positively associated with amount of the loan borrowed, adequacy of the loan, interest rate paid and the number of times the SME has borrowed. The relationship between the stock accumulation and the amount of loan borrowed is highly significant at 1 percent level of significance. Other variables have positive associations but are not statistically significant. The results further show that an increase in the amount borrowed by one million Uganda Shillings leads to stock accumulation by about 141.5 percent. The type of collateral be it car log book or buildings and length of time it takes to process the loan are negatively associated with SMEs' stock accumulation. This could be explained by the fact that SMEs owners in eastern Uganda do not have cars and buildings to stake as collateral security. The length of time it takes to process a loan has a negative association with stock accumulation (as shown in model 2), implying that the longer the time to

get a loan; the less is stock accumulation because the borrowers will not have finances to expand on their stock.

The above argument is in conformity with MFPED (2008), which identified the main factors that often influence SMEs access to finance as; *Firm size* - larger firms have greater access to finance; *Nature of ownership* – locally owned firms tend to have less access than foreign-owned firms because of lack of sufficient collateral/securities and information; *Credibility of information* for example availability of audited accounts; *Firm age* – older firms are more likely to access financing than younger firms. This suggests that younger, smaller, locally owned firms with poor documentation would not easily have access to bank financing. Further, it is consistent with theory in the laws of demand and supply that increasing sources of finance (or improving access) would reduce cost. Prevailing high interest rates could be linked to limited financial depth, high lending risks (actual and perceived), and lack of effective competition in the financial sector. This implies that SMEs find it difficult to access financing in part due to lack of collateral to secure loans but also because they are considered "high risk" clients. High risk is attributable to a number of factors including poor management skills, uncertainty of their businesses and poor record keeping practices. As a result, in addition to highly valued collateral, the interest rate charged to businesses is very high often ranging from 22 percent to 30 percent on short term lending (World Bank, 2004).

The survey by Ngwenya and Ndlovu (2004) revealed that all MFIs provided credit to SMEs for day to day operations and expansion purposes rather than as start-up capital. This is because MFIs insist that the project should have been in operation for at least 6 months before it can be considered for funding. Most of the SMEs had initially used either personal or family savings for urban and rural based respondents respectively. The rest had used other sources of funding that included grants and donations. It is worth noting that the family interdependency is still dominant in the rural setting where some individual ownership of assets is still rare. Some respondents had actually inherited the irrigated plots from parents and as such inputs were jointly sourced. Seventy-eight (78 percent) of the SMEs had borrowed at least once from the different sources. The incidence of multiple borrowing is fuelled by lack of credit reference bureaus.

The above scenarios point to the fact that MFI services greatly impact on the growth capacity of the SMEs. If the MFIs services are restrictive, then the growth of the SMEs will be curtailed and therefore, there is need for conducive MFI policies that would promote the growth of SMEs.

4.5 Microfinance Services and SMEs Employment Growth

The SMEs' non-financial activities are measured by change in level of employment. The accumulation of non-tangible assets like the labor force or the abilities to participate in the innovation process, which play a key role within the micro and innovative units contribute to growth, especially, of SMEs. Labor is considered as a critical input in the production process just like any other productive factors. Its accumulation leads to increased capital deepening and a period of accelerated growth (Mankiw et al. 1992). As shown by the characteristics of SMEs

under this study, 34 percent used part of the loan from the MFIs for operational cost by hiring additional units of labor to help in the running of Small and Medium Enterprises. It has always turned out that the amount of money spent to hire labor depends on the services provided by the lender and the stringent conditions attached to the loan. This section establishes the extent to which MFIs services and conditions of borrowing affect the decision to use the loan to hire labor by the SME.

Table 4: MFIs services and SMEs non-financial activities /employment abilities

Variable	**Model 1**			**Model 2**		
	coeff	**Std err**	**t**	**Coef**	**Std err**	**T**
Amount of capital that was borrowed	0.0133***	0.0045	2.92	-	-	-
Adequacy of the borrowed amount	-0.0761	0.0644	-1.18	-0.1277**	0.0618	-2.06
Loan repayment period	-	-	-	0.2643***	0.0461	5.72
Interest rate paid	-0.0054*	0.0052	-1.05	-0.0047	0.0049	-0.96
Time it takes to process the loan	-0.0109	0.0209	-0.52	-0.0154	0.0199	-0.77
Nonfinancial services provided by Mfi(advisory)	-0.1663	0.2133	-0.78	-0.0781	0.2042	-0.38
Nonfinancial services provided by MFIs(training)	-0.1102	0.2174	-0.51	-0.0286	0.2081	-0.14
Nonfinancial services provided by MFIs(counseling)	-0.2347	0.2231	-1.05	-0.1251	0.2138	-0.59
Nonfinancial services provided by MFIs(Corporate Social Responsibility)	-0.1367	0.2380	-0.57	0.0264	0.2292	0.12
_cons	0.5556**	0.2629	2.11	0.1834	0.2603	0.70
Number of observations	245			245		
F(8, 236)	1.67			4.75		
Prob.>F	0.0176			0.0000		
R^2	0.0535			0.1387		
Adj R^2	0.0214			0.1096		

*** 1 percent level of significance, ** 5 percent level of significance and * 100 percent level of significance.

The results in table 4 are divided into two models. This is because the amount of the loan borrowed and loan repayment period are significantly correlated. These models are generated by considering OLS regression with one of these variables in turn. It can be seen that model1 explains only 5.3 percent of the influence of MFI services on the decision by SMEs to use the loan to hire labor units or create employment. The amount of the loan borrowed is positively associated with increase in employment. This follows from theory that the higher capital cost outlay the more factor inputs are hired by the firm. For the SMEs, the finding shows an increase of a loan by Uganda Shillings 1million will increase employment level of SMEs by 1.33 percent and this finding is significant at 1 percent level of significance.

Similarly, amount of interest rate charged on the loan negatively impacts on the ability of SMEs to hire new units of labor. This means that as interest rate charged increases the labor hired by SMEs significantly falls. Evidently, from model 1, a percent increase in interest rate lowers employment level of SMEs by about 0.54 percent. This is significant at 10 percent. This is consisted with theory because interest rate is a cost to the firm and the high rate of interest will constrain the firm to hire more labor. This then implies that greater efforts have to be put in place to keep low the interest rate so as to allow more funds to employ more factors of production including labor.

The variables like adequacy of the loan borrowed and time it takes to process the loan are also negatively associated with the SMEs' employment generation abilities. In essence indicating that if the loan is inadequate then less of it will be used to hire extra units of labor. Likewise, if the time for processing the loan increases then less of it is used to hire extra labor because the borrowers will be de-motivated to borrow.

The results show that non-financial services offered by MFIs to SMEs like advisory, training, counseling and Corporate Social Responsibility do not expand employment as expected. This because these services increase on the cost implications of the SMEs and subsequently reducing finances available for hiring extra labor. Part of the explanation is that sometimes the costs of these services are borne by the SMEs themselves an in addition, the non-financial services target more the existing clients and staff rather than the hiring of new labor force. Nevertheless such services continue to guide the SMEs in the direction of better business operations and thus need to expand their spectrum in terms of going beyond concentrating only on loan and savings as products but handle other cross-cutting issues in their package of service delivery such as protection of the environment like planting trees, HIV/AIDS awareness, and advisory services through training on business plans, business skills development and record keeping. Small and Medium Enterprises have to be helped improve their management systems and adopt basic management information systems if they have to reap from the current business environment. They need to improve their financial record keeping and other records. This will reduce operational inefficiencies. There is need to provide more information to SMEs as clients and this calls for total disclosure of all loan costs to SMEs by MFIs. However, this can only be possible with the support of MFIs, Government and the development partners.

The above arguments resulting from the model are enhanced by information from the key informant interviews which reveal that technology related training; advisory services and business counseling skills received by the SMEs positively affect their sales growth and employment capacity of the entrepreneurs. This enhances expansion capacity of SMEs because there is agreement that offering such services in the long run create more employment opportunities for the labor force. The same arguments are enhanced by revelations of the participants during the stakeholders' dissemination works in Iganga district where one of the Commercial Officers argued thus "*SMEs entrepreneurs today need constant business advice, general training in record keeping and information technology related training they are empowered to improve their business environment".* He argued that this will reduce help reduce on the default cases and ensure stable business environment and expansion in terms of business profits and employment generation. Similar views were shared by policy makers and academicians in another Workshop organized in Kampala that "*Microenterprise development has an immediate and lasting impact on the quality of life of the poor- the ability to afford food, shelter, education and health care. As business income increases, the business is able to expand and effect spreads beyond family into the local community, through employment and contribution to the national economy. Thus the benefits of SMEs growth help growth of not just businesses, but also make communities strong as well*". Another participant argued thus *"Being*

closer to the poverty line a household enterprise is more risk averse than a specialized enterprise with separate accounts and limited liability; risk aversion restrains the propensity to invest in new production technologies, which would boost employment".

Previous studies provide strong evidence of a positive association between the use of technology related training and business performance, with observed differences in profit level across enterprises and sectors reflecting varying innovative environments (Bigsten et al., 2003 and Daniels, 2003). Hulme and Mosley (1996) find indeed limited technological innovation and increases in labor productivity as a result of micro loans. Therefore, from the discussion, it is important to provide entrepreneurial education (training in different technologies) and basic business management (advisory and business counseling) to SMEs entrepreneurs so that they are able to effectively manage their enterprises and raise the employment levels within the Economy.

Similar studies emphasize the association of SMEs to employment growth as argued by Ahmed (2008) that SMEs are major contributors to private sector employment. Empirical studies have shown that SMEs contribute to over 55 percent of GDP and over 65 percent of total employment in high income countries. Small and Medium Enterprise and informal enterprises, account for over 60 percent of GDP and over 70 percent of total employment in low income countries, while they contribute about 70 percent of GDP and 95 percent of total employment in middle income countries. The SMEs play significant contribution in the transition of agriculture-led economies to industrial ones furnishing plain opportunities for processing activities which can generate sustainable source of revenue and enhance the development process. They help to absorb productive resources at all levels of the economy and add to the formation of flexible economic systems in which small and large firms are interlinked. Such linkages are very crucial for the attraction of foreign investment as corporations look for sound domestic suppliers. SMEs are the major growing force behind the fastest growing economy of China, in terms of contribution to the national GDP (accounting for 40 percent), scale of assets, diversification of products, and the creation of employment.

In model 2, the amount of the loan borrowed is excluded. Meanwhile the time it takes to pay the loan is included with other variables as explaining variable. This model explains 13.9 percent of the influence of MFIs non-financial services on the employment generation by Small and Medium Enterprises. The findings show that, loan repayment period significantly influences the decision by SMEs to hire extra labor. The loan repayment period is positively associated with employment generation and is significant at 1 percent level of significance. The findings show that if the loan repayment period is raised by one year, SMEs can raise the level of employment by about 26.4 percent. However, the adequacy of the loan borrowed is negatively associated with employment in model 2 just as it is in model1 and is significant at 5 percent level of significance. It means that inadequate loans restrict employment generation by about 12.8 percent because the loan will be allocated to other cooperate factors of production other than the labor.

Other variables in model 2, like interest rate, the time it takes to process the loan and non-financial services of MFIs (advisory, training, counseling except Corporate Social Responsibility) have negative associations with the job creation by SMEs but are not significant. The inverse relationship between the interest rate, duration of loan processing and non-financial services with employment arises because as these variables take a positive trend the SME risks and cost implication increases in the same direction leading to minimization of costs by partly reducing or not hiring more labor.

4.6 The Effects of Socio Economic Characteristics on the growth of SMEs

Table 5: Effects of socio-economic characteristics of on the growth of SMEs

Variable	Model 1			Model 2		
	coeff	**Std err**	**t**	**Coef**	**Std err**	**t**
Location	-0.1866*	0.0999	-1.87	-	-	-
Ownership	-0.2069***	0.0615	-3.36	-0.2071***	0.0621	-3.34
Major source of business capital	-0.1018	0.0735	-1.39	-0.1068	0.0746	-1.43
Highest level of education (none)	-0.4173	0.2726	-1.53	-0.0363	0.5393	-0.07
Highest level of education (primary)	-0.1363*	0.0778	-1.75	0.2093	0.4723	0.44
Highest level of education (secondary)	-0.1042	0.0681	-1.53	0.2221	0.4710	0.47
Highest level of education (university)	-	-	-	0.3515	0.4730	0.74
Highest level of education (tertiary)	-	-	-	0.3114	0.4787	0.65
Time period business existed	0.0421	0.0352	1.18	0.0289	0.0357	0.81
Default history	0.0427	0.0863	0.50	0.0289	0.0875	0.33
-cons	0.6494***	0.1339	4.85	0.1782	0.4693	0.38
Number of observations	269			261		
F(8, 252)	2.95			2.27		
Prob.>F	0.0036			0.0185		
R^2	0.0856			0.0752		
Adj R^2	0.0569			0.0421		

The socio-economic characteristics of SMEs play an important part in enabling their growth and the factors are; location, source of business capital, highest level of education attained by entrepreneur, the age of business and default history of SME.

From model 1, it can be seen that location, major source of business capital and highest level of education are the key variables that significantly explain the growth of Small and Medium Enterprises. Ownership is significant at 1percent level of significance. This implies that if ownership changed from sole proprietorship to other forms, such as, partnerships, then employment growth (as a measure of growth of SMEs) will increase by about 20.7 percent (from 1 to 3persons). Likewise, a change in location from say rural setting to urban center will increase employment level by 18.7 percent (from 1 to 2 persons). Other socio economic characteristics like, being uneducated is negatively associated with growth of SMEs. The time period of business existence and default history are positively associated with the growth of SMEs, that is, the longer the business has existed, the more likely that it will grow faster than those businesses which are just beginning and the lower the default level the more likely that the business can access the loan and employ more labor because of a good repayment history or portfolio.

In model 2, ownership remains significant at 1percent level of significance. The percentage influence in growth also remains the same (20.7 percent). Major source of business capital and no education negatively impact on level of employment but are not significant. The other social economic characteristics like highest educational attainment (primary, secondary, tertiary and university), time period business has existed and default history are all positively associated with growth of Small and Medium Enterprises.

4.7 Constraints to SMEs' access to MFI services

Table 6: The logit model results

Model 1			
Independent variables	**Odds ratio**	**Z values**	**p>|z|**
location	0.0166*	-1.83	0.068
ownership	0.5042*	-1.92	0.055
Highest level of education(primary)	3.71e+10***	10.10	0.000
Highest level of education(secondary)	1.33e+10***	9.74	0.000
Highest level of education(tertiary)	4.98e+09***	9.11	0.000
Highest level of education(university)	8.19e+09***	9.51	0.000
Time period business existed	0.7379	-1.53	0.126
Amount of business capital	0.9939	-1.25	0.211
Quantity of output before loan (per month)	0.9904	-1.49	0.136
Assets owned before the loan (land)	1.3852	0.41	0.685
Assets owned before the loan (buildings)	1.0015	0.00	0.997
Liabilities before the loan	0.8712	-0.81	0.421
Default history	3.4141*	2.02	0.043
Number of observation	242		
Chi2(15)	52.26		
Prob	0.0000		
Pseudo R2	0.1726		
Model 2			
Purpose of the loan (merchandise)	0.9066	-0.21	0.834
Purpose of the loan (machinery)	1.0513	0.11	0.915
Interest charged on the loan	1.0105	0.46	0.647
Number of times borrowed	1.2478	1.25	0.213
Whether loan needs security	3.4428**	2.34	0.019
Time it takes to process the loan	.83965*	-1.82	0.068
Number of observation	260		
LR chi2(6)	11.29		
Prob > chi2	0.0797		
Pseudo R2	0.0345		

*Note * and ** signify levels of significance at 0.1 and 0.05 respectively.*

Model 1 and model 2 represent borrower and loan characteristics.

Both results of the logit model indicate that the predictors were all simultaneously significant at 10 percent as indicated by the probability values of the likelihood ratio (LR) statistic. The logistic regression results reveal a number of constraints of SMEs access to the MFIs services; such constraints ranged from location, ownership, highest level of education, time period the business has been in existence, amount of business capital, quantity of output produced, assets

owned before the loan, liabilities before the loan and loan history of the client. In the study the constraints were captured as borrower's characteristics.

The level of education influenced access to MFIs services significantly. Clients of SMEs who had completed primary education had 3.7 chances of accessing MFIs compared to their counterparts that did not and the results were highly significant at 5 percent level of significance. The results also indicate that schooling increases the probability of accessing a loan. All the coefficients of education are highly significant at 5 percent level of significance. Consequently the borrowers with higher levels of education have higher chances of accessing loans compared to their counterparts. Clients whose level of education was secondary had 1.3 chances of accessing MFIs services compared to their counterparts that did not and this factor was also highly significant. Clients whose level of education was tertiary including those with diplomas and certificates had 5.0 chances of accessing MFIs services compared to their counterparts that did not and this factor was also highly significant. Clients of SMEs whose owners had completed university education had 8.2 chances of accessing MFIs services compared to their counterparts that had not completed that level of education. Therefore the results indicate that education levels have considerable influence on the probability of obtaining a loan from a micro finance institution. This is acknowledged in literature where Bhatt et al (1999) argue that entrepreneurs need formal education in order to comprehend complex information, keep business records, conduct cash flow analysis and make the right business decisions. Hence borrowers with higher levels of education may have higher repayment rates (Bhatt and Tang, 2002). Overall, clients with higher education levels had more chance to access loans than those with low education level, possibly because the highly qualified clients can source loan information more easily.

Clients of SMEs who owned land as an asset before applying for a loan were less constrained to access MFIs services and they had 1.4 chances of access compared to their counterparts that did not own assets before applying for a loan. Collateral is considered as an important part in the lending process. This is in agreement with Mutua (1996) who argues that since the lender takes calculated risk, borrowers must demonstrate their good faith by showing that they too have something at stake in the deal. In other words, lack of assets limits borrowers' access to loans. Moreover, land is valued as a reliable form of collateral security by MFIs attached to loans.

Clients of SMEs who had a good history of paying debts were less constrained to access MFIs services and they had 3.4 chances of access compared to their counterparts that had a bad history and this factor was also very significant at 5 percent level. This is in conformity with (Amino et al, 2003; Feder and Zilberman). The lender will always need to know whether the applicant has been repayment worthy in the past loan. The lender always seeks this information from the network of financial institutions especially formal financial institution (Okpukpara 2009). This is also a good credit history is requisite for accessing a new or repeat loans because a client will have established loyalty with the Microfinance Institutions.

The location of the SME business was statistically significant in explaining the constraining factors of SMEs accessing MFIs services; the regression results show that there is significant relationship between location and SMEs access to chances of accessing credit in a Micro Finance Institutions. This is in agreement with some of the writers who argue that if an entrepreneur's business is located close to the lender, it is easier for the lender to get information on the borrower and to provide her with appropriate technical assistance (Mohamed 2003, Bhatt and Tang 2002). Thus SMEs distant from MFIs had lower chances of accessing loans.

Similarly factors like the time period the business has been in existence, amount of business capital, quantity of output before the loan and liabilities before the loan were all not statistically significant in explaining constraining factors inhibiting access of SMEs to MFIs services. By their odds ratios which are all less than one, they are less likely to influence access to microfinance services.

Other factors relating to characteristics of the loan other than those of the borrower also had influence on the access of MFIs services by SMEs clients. These factors included the purpose of the loan, interest rate charged, number of times of borrowing, security on the loan and time period for processing the loan. Cases where the purpose of the loan was for purchasing machinery, then there were more chances of 1.1 times to access the loan compared to other purposes for instance those purchasing merchandise were less likely to access the services of MFIs compared to machinery purchases.

Interest rate charged on the loan was also a constraining factor on access to microfinance services. A loan with a higher interest rate had 1.0 chances of being accessed compared to one with less interest. High interest rates and short maturity periods constitute a very serious problem in the provision of adequate financial services to SMEs and Ugandan economy being one of the most liberalized in Africa, such a situation requires if there are optimal tangible results from SMEs. High interest rates are generally explained by operating expenses of the microfinance industry and thus although the rates can be legitimately high, inefficient operations of MFIs can even push them further hence the need for paying attention to the operating costs. Most important is that clients take access to credit more crucial than the interest rate charged hence they will continue to borrow at whatever cost (Dullien 2011). High interest rates and short maturity periods constitute a very serious problem in the provision of adequate services to SMEs and Ugandan economy being one of the most liberalized in Africa, such a situation requires if there optimal tangible results from SMEs. This calls for a reconsideration of interest rate subsidies and maturity periods mainly to the starting SMEs.

Repayment schedules in terms of when one begins to start paying the loan need to be looked at debated so as to offer grace periods and extending loan periods. This will aim at minimizing the default rates. This means that the MFIs must address the challenge of providing adequate services to their clients in terms of the loan and other products. They can do this by appealing for

more donor support from the developed world so as improve the business investment environment.

The number of times one has borrowed the funds also influenced the access to MFIs services by SMEs in that if an SME had borrowed many times from a microfinance institution, it had 1.2 chances to access funds compared to one with fewer number of times.

The loan security also influenced the access to MFIs services by SMEs in that if the loan required security, it had 3.4 chances of being accessed compared to one that did not need security and this was also statistically significant at 5 percent level.

The time taken to process the loan also influenced access. Whereas this was statistically significant at 10 percent level, it was less likely to constrain much the access to the services of MFIs as the odds ratio indicates.

Generally the findings of this study show similarities with earlier studies but most important is that SMEs face unique problems, which affect their growth and profitability and hence diminish their ability to contribute effectively to sustainable development (ILO 1989). Such problems are so challenging that SMEs survival, growth and competitiveness are threatened. In other cases, it is the inappropriate handling of these obstacles that causes SMEs to fail. The constraints that hinder SMEs performance and competitiveness are in some cases internal to the institution and require locally based solutions instigated by the business owners with support from other sector players. In other instances, the constraints are external in nature emanating from the prevailing policy, regulatory and institutional environment framework which is usually out of the control of the business firms. According to the survey by MFPED (2008), four main external constraints that affect Ugandan SMEs relate to availability of electricity, cost of financing, quality of transportation and access to telecommunications. These findings were comparable with those of the Investment Climate Assessment Study of 2004, which ranked the cost of finance and electricity problems among the five main constraints in the business environment in Uganda (the other three main constraints being; tax rates, macro-economic instability and access to finance).

Lack of access to appropriate technology, low skills and education levels have also been ranked as the most pressing internal constraints to SMES growth, according to the survey results (MFPED, 2008). First, these constraints by their nature make it difficult for SMEs in Uganda to develop their productive capacities, maximize their competitiveness and contribute to sustainable economic growth. Second, and as highlighted in the UNCTAD (2007), appropriate technology, skills, education and information, specifically those required to operate existing systems and the ability to adapt systems to changing demands, are essential for the sustainable growth of enterprises. The persistence of the same or similar constraints over a number of years suggests low or inadequate public investment and action to alleviate these problems. It could also be symptomatic of poor planning with regard to improving the competitiveness of SMEs in Uganda. Qualitative analysis of the information gathered from the field corroborated with the quantitative to a very great extent; the key highlighted issue was the default rate. On default rate, 15 percent

of the respondents had acquired loans from microfinance institutions and failed to pay as shown in the table below. The reasons for default according to the respondents were: the high interest rates, theft of goods; short grace period; diversion of funds to cater for other needs rather than intended investment. Some respondents for instanced confessed to have used the money for non-intended activities like paying school fees or meet other unforeseen contingencies like illness.

Table 7: Default rate among clients of SMEs

Default rate	Frequency	Percentage
Yes	35	15.4
No	193	84.6
Total	228	100

Of those that had defaulted, 60 percent had their assets lost as collateral. The assets lost included: grinding/ milling; sewing and welding machines. Finished products like doors, beds, cupboards, raw materials like timber and stock could also be confiscated by officials of microfinance institutions. In worst cases land and buildings were taken too. In cases where defaulters went into hiding, sureties could be arrested. Those with money could clear debts of defaulters otherwise serve jail sentences. Some entrepreneurs when interviewed revealed that perhaps some MFIs lend with intention of confiscating their properties collaterals and thus making their services enemies of poverty reduction as they some clients poorer than before accessing services. Similar ills were confirmed during the stakeholders' workshop held in Iganga district; participants called for government intervention to regulate the entire microfinance industry and safeguard the society against some of the unscrupulous microfinance institutions.

Most of the entrepreneurs that had approval of MFIs proposed the implementation of improving access to financial services provided by these institutions. This could be done by lowering interest rate to rhyme with that of commercial banks, discouraging corruption during the process of loan processing as revelations from SME entrepreneurs indicated that some loan officers needed to be "oiled" so as to quicken the process and access more funds. There were also issues of extension of the grace period where the said period was too short, some expressed dissatisfaction highlighting the need to give the SMEs reasons time to pay after realizing proceeds from the given loan. There is also the need to minimize transaction costs by reducing various charges to the loan product; government subsidizing power so that sales are increased thereby minimizing default rates; quick loan processing; small amounts of installments; removal of collateral security; availing more financial institutions in rural areas and more sensitization of entrepreneurs by Microfinance institutions.

On the other hand however, using key informant interviews, the managers of MFIs revealed that they encounter several challenges while lending to SMEs among which are; high competition in the industry; high default rates; high delinquency rates; multiple borrowing and diversion of loan purpose. They further argued that the industry has several hitches which can be improved by increased government funding to MFIs, rigorous client sensitization, creating special to access

credit at no interest rate since they charge high interest rates because of several uninsured risks involved.

5.0 Conclusion, Recommendation and Policy Option

The section provides the key conclusions and recommendations on the issues that are raised in this research paper, especially on the aspect of impact of MFIs on the growth of SMEs in Uganda as a means of enhancing their productivity and competitiveness.

5.1 Conclusion

Microfinance plays a central role in the growth of micro enterprise but this is only possible if it is accessible and reasonably priced. SMEs are increasingly seen as playing a strategic role in economic growth, despite experiencing difficulties in accessing financial and non-financial products from MFIs to finance their working capital. Some of the reasons for limited accessibility include limited levels of education to provide management and technical skills, lack of collateral, poor technology, poorly located enterprises or long distance to the nearest MFI and sometimes limited market. In cases where SMEs succeed in accessing financial resources, the interest rate is high, which sometimes lead to high default rates or non-performing loans. This calls for a need to overcome constraints that would impede their access to financial resources. Uganda, therefore, needs to create the necessary institutional and regulatory framework environment for both SMEs and MFIs to overcome access problems and constraints such as lack of skills, lack of financial records and high default rate problems. The conclusions are drawn from the foregoing discussion:

i. The main constraints that affect Ugandan manufacturing SMEs include availability of cost of the loan product (interest rate), cost of electricity, adequate amount of the loan, distance to the nearest financial institutions, lack of collateral and limited technical skills. These constraints are tagged to symptoms of low government investment over several years and inadequate attention to long-term planning in the critical development sectors.
ii. It is also clear from the findings that the existence of supporting institutions does not guarantee the effectiveness of the whole support system. Most of the existing MFIs do not have adequate outreach and the institutional framework for SMEs in Uganda is fragmented with many of the institutions unable to offer effective services to their members.
iii. Efforts to improve the competitiveness and the business climate of the SME sector will require progress in several sectors including: infrastructure development, providing a conducive fiscal and monetary policy with reasonable interest rates, and providing a conducive business operating environment.
iv. Sustainable progress in addressing the challenges affecting SMEs will only be achieved through a coordinated institutional framework comprising of; (a) strong public-private partnerships (PPPs) between government and business associations to implement the proposed recommendations and foster dialogue between the players and (b) establishment

of the SME Authority as a powerful single-point administrative structure that cuts across administrative and financial barriers and fully implements policy and other actions affecting SMEs in a timely and effective manner.

5.2 Recommendations and Policy Options

The study recommends for; i) Establishment of an SME Authority and ii) enhancing SME competitiveness in Uganda focusing on institutionalizing public-private partnerships in Uganda.

5.2.1 Establishing the SME Authority and Inter-institutional Coordination

It is clear from the findings that the existence of supporting institutions like *Bona Bagagawale* (Prosperity for all), NAADS, Microfinance outreach Plan, Uganda Small scale Industries Association (USSIA) and Association of Microfinance Institution of Uganda (AMFIU) does not guarantee the effectiveness of the whole support system. Indeed, evidence from the field survey shows that even where there is a range of support institutions, effective financial and non-financial support is often not available. It is also well understood that the responsibility for effective support does not lie with government alone, but government is a key actor, particularly where markets do not yet provide effective support services. In view of the aforementioned, certain strategies are needed to enhance the quality of institutional support for SME growth. Establishment of the SME Authority would create a powerful single-point administrative structure which cuts across administrative and financial barriers and fully implement policy and other actions affecting Small and Medium Enterprises. The Authority should have powers to formulate policy, expedite approvals from other government agencies and resolve issues encountered during implementation of agreed actions. In operational terms, the Authority should be an independent body and should function as a "one stop shop" which could coordinate and facilitate information delivery to Small and Medium Enterprises. This recommendation is in line with two successful organizations in Serbia and the United States set up by law to support the development of Small and Medium Enterprises.

Inter-Institutional coordination is in line with the Uganda National Development Plan which contains a National Vision 2035 in which SME growth is a key component. However, this Vision need to be supported by clear strategies for its achievement as well as the people, skills, technology and financial resources to enable implementation of the strategies in a timely, efficient and effective manner. Coordination among several ministries and local governments is necessary to achieve the outcomes of a well thought out strategy. The strategy needs to be integrated into the national policy in other sectors for example education, labor, trade and industry and district planning, among others. There is need for an SME Policy Unit which should act as interim measure to facilitate effective coordination. This can be done through the following strategies;

i) Categorization of all SMEs

There is need for re-categorization of SMEs perhaps to go beyond number of employees, capital and asset base where emphasis in Uganda is the number of employees. Thus other characteristics need to be assessed and considered with a view of concentrating on the potential of the SMEs to provide for the livelihoods of the majority poor given the demand conditions. This is because they are increasingly playing a strategic role in economic growth and development through their contribution in the creation of wealth, employment and income generation. Hence their existence need to be supported as they tend to be more innovative and constituting a 'seedbed' for the development of other new firms and this makes them create more employment and income generation through self-employment, domestic linkages, continuous supply of required skills, all of which are necessary tools for poverty alleviation. Re-categorization will help MFIs not to concentrate only on number of employees and amount of capital before the loan only, but assess other factors including the potentialities of a given Small and Medium Enterprise.

ii) Regulation of all MFIs

Regulation is very necessary at this critical time to minimize or avoid multiple borrowing. This is because majority of the MFIs that lend to SMEs mainly in the rural countryside do not fall under the Credit Reference Bureau (CRB) framework of the Bank of Uganda. This creates a big problem as clients accumulate debts from various MFIs since there is imperfect information. This increases the default rate among the clients. This is worsened by the fact that there are no National Identification Cards in Uganda hence the owner of an SME can borrow from different sources at ease. Regulation will minimize such a problem to allow better service delivery. Establishment of credit reference bureaus to cover all the MFIs for instance will help minimize the percentage of defaulting so as to help MFI provide better service. In addition, the regulation will help in moderation of interest rate regimes and thus minimizing the delinquency and default rates due to unviable repayment periods.

5.2.2 Institutionalized Public-Private Partnerships

Addressing these challenges affecting SMEs is not the work of government or the private sector alone but would require institutionalized public-private partnerships involving government and business associations to implement the following:

i) **Strengthening business associations:** According to the field data, some enterprises do see the benefits to joining business associations. Associations should improve their credibility, through adopting principles of good corporate governance, address internal weakness and ensure their relevance to members and sustainability through provision of useful services to members.

ii) **Improving access to finance for SMEs:** The government in collaboration with the private sector needs to accelerate the pace of financial reforms to improve the range and availability of loans and other financial services for SMEs and also encourage financial

literacy a key component of financial inclusion. Reforms could include a framework that allows SMEs to collateralize their assets and policies that promote savings mobilization. In addition a special credit fund aimed at providing adequate credit to MFIs at concessional rates that would allow them offer favorable lending rates to the SMEs clientele in the rural sector could be put in place. This is will address the problem of high operational costs that automatically push interest rates up such that the MFIs have no option but to lend at a rate which will allow them cover operational costs. Whereas there is the Micro-Finance Support Center in Uganda is providing wholesale credit services to the sector, its focus is limited to the SACCOs under the 'Prosperity-For-All program' excluding other MFIs in the industry. This calls for the need to widen the wholesale lending catchment financial institutions to include all the microfinance institutions.

iii) **Promoting Business Development Services**: The government should work with service providers and associations to develop markets for BDS dealing with information, training and other business services in order to increase the range of services available to SMEs and the outreach to all parts of Uganda.

iv) **Improving information dissemination on available initiatives**: The relevant institutions and project that provide assistance to SMEs should more aggressively disseminate information on the services they provide to the sector.

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Appendix 1: Reliability test

Model for objective one test for reliability of items

Test scale = mean(unstandardized items)

Item	Obs	Sign	item-test correlation	item-rest correlation	average inter-item covariance	alpha
Amount of funds	263	+	0.7565	0.1367	.1942147	0.4456
Amount of loan	263	-	0.1181	0.0662	.6055823	0.7985
Repayment prd loan	263	+	0.2340	0.1769	.564436	0.4874
Interest rate	263	+	0.6744	0.1466	.1294101	0.6796
No.of times borrd	260	-	0.1117	0.0382	.6183944	0.6031
Type collateral	252	-	0.1852	0.0641	.580797	0.7952
Process time	262	+	0.2782	0.1450	.4939935	0.5701
Test scale					.4555882	0.6256

Model for objective two- test for reliability of items

Test scale = mean(unstandardized items)

Item	Obs	Sign	item-test correlation	item-rest correlation	average inter-item covariance	alpha
Amount of fund	263	-	0.6810	0.1510	.0788651	0.4349
Amount of loan	263	+	0.0999	0.0501	.2035827	0.7540
Repay loan prd	263	+	-0.0441	-0.0694	.2537953	0.4860
Interest rate	263	-	0.5495	0.1583	.0027796	0.6041
Process period	262	-	0.1598	0.0430	.1692547	0.6336
Advisory services	247	-	0.2166	0.1676	.1986865	0.6518
Referencing clients	247	+	-0.0773	-0.0914	.2245108	0.7682
Training	247	+	0.2940	0.2511	.1906564	0.7464

Counseling clients	247	+	0.0114	-0.0235	.2232246	0.7675
Corp Soc Resp	247	+	-0.0729	-0.0983	.2277649	0.6703
Test scale					.177438	0.5934

model for objective three reliability test

Test scale = mean(unstandardized items)

Item	Obs	item-test Sign	item-rest correlation	average inter-item correlation	covariance	alpha
Source of loan	263	-	0.2461	-0.0360	.6611305	0.6279
No educ level	262	+	0.1149	0.0393	.5840604	0.5113
Primary educ	262	+	0.4127	0.1130	.3787320	0.5459
Secondary educ	262	-	0.7357	0.4915	-.349621	0.5472
Tertiary educ	262	+	0.2549	-0.0343	.6725520	0.6326
University educ	262	+	0.2414	0.0411	.5481409	0.7881
Other educ	262	+	0.0367	-0.0072	.6072480	0.796t
Time period	263	+	0.5918	0.0211	.5961307	0.5945
Ever defaulted	263	-	0.2656	-0.0011	.5370604	0.4882
Test scale					.4705901	0.6147

Appendix 2: Response on the Reviewer's Comments

"GRANT NO: TA-11-046"
THE IMPACT OF MICROFINANCE SERVICE DELIVERY ON THE GROWTH OF SMES IN UGANDA"

	REVIEWER'S COMMENTS	*RESEARCHERS' RESPONSE*
1	The topic addresses an important and novel construct of growth and development of SMEs in Uganda. The woes of growth and development of SMEs is attributed to microfinance service delivery. In its current form, the topic suggests that the problem under investigation resides in the growth and development of SMEs. Given this orientation, the study should therefore attempt to provide a theoretical and empirical foundation for the research gap in the background, which is currently missing. The background is weak and does not provide support for the research problem. What did the researchers set out to investigate?? The research problem is not stated at all. I'm of the view that the researchers rewrite the background providing context and evidence to the problem of SME growth and development, while simultaneously addressing the predictor variables. Empirical data on growth and development of SMEs should be presented in the background. I also think that the concepts of "growth" and "development" can easily be studied as separate constructs. The predictor variable of microfinance service delivery is poorly conceptualized or at most absent from the study.	• *The research team dropped the development construct and focused on the growth construct which is quantifiable and measurable.* • *The theoretical background on the growth of firm is included and empirical statistics on SME growth in Uganda and Africa captured to enrich the study background.* • *The study focused on finding out the impact of microfinance service delivery (all products/services offered) on the growth of SMEs. Hence the mainstay of the research problem.* • *The predictor variable " microfinance service delivery is defined by the financial and non-financial products /services offered by MFIs*
2	Rewrite and state the research problem. This should form the central thesis of your work.	*The research problem has been reviewed and rewritten to explicitly state predictor variables "financial and non-financial products /services" against the influenced variable "SME growth". Page4 clearly shows the reworked and adjusted research problem*
3	The researchers forgot the predictor variable of microfinance service delivery which is explicitly stated in the topic and purpose of the study. There is no evidence of having operationalized and studied the microfinance service delivery construct. This construct is neither presented in the conceptual framework on page 13 nor are its measures visible in the questionnaire since it was not appended to the report. A critical review of the conceptual model and objectives of the study reveals the absence of the "microfinance service delivery" construct in the entire study?? Instead other variables of "microfinance financial products", "microfinance non-financial products", "business climate factors" etc. are presented. Is this possible??	*The research team has endeavored to explain microfinance service delivery construct-defined by the microfinance financial and non-financial products/services offered. The microfinance service delivery construct has been clearly indicated in the conceptual framework as the financial and non-financial services that influence SME growth as clearly state in conceptual figure page19*
4	There is need to re-align the Hypotheses of the Study with the study objectives. The Hypotheses of the Study are neither derived from the critical review of literature nor are they clearly developed and stated.	*The hypotheses of the study have been matched with the study objectives and the clearly and restated ones can be viewed on page 5.*
5	The conceptualization of SME growth and development as presented in the literature review section and conceptual model on page 13 is inaccurate and misleading. This consequently affects the accuracy of the	*The conceptualization of the theoretical and empirical basis of the study has been built from the study background, aligned in the conceptual framework and related literature from national*

	results. This may call for a re-analysis and presentation of data.	*and international sources review to give a conceptual understanding of microfinance service delivery and SME growth.*
6	Literature review is weak and poor. Little effort was made to locate and review the most relevant, recent and scholarly work in the subject / topic area. This section seems to be a collection of notes. An attempt should be made to rewrite this section and present a piece of writing that supports, evaluates and critiques the research topic. The researchers should concentrate their efforts on the scientific literature putting the greatest emphasis on research journals that use a blind review system. Information that provides context and evidence should **cautiously** be taken to either the background or methodology sections of the report. Researchers should remember that writing a literature review is an active, critical and constructive exercise which forms an important part of mobilizing the central thesis.	*Critical review, evaluations and writings supporting the literature has been improved and thematized based on the study objectives. A number of journals have been reviewed to enrich this section.*
7	Section 3.2 gives an impression of dishonesty of the researchers. Researchers present a research design which was not adopted. It is difficult to discern the stated claims from the study as reproduced hereunder. Nahamya et al. (2012, page 13) state that *"The study adopted a flexible and eclectic research approach that combines relevant aspects of quantitative, qualitative, and participatory methodologies within the broad framework of evaluating the impact of microfinance service delivery to the growth and development of SMEs. The quantitative method dealt mainly with economic indicators (e.g., business turnover, employment, etc.); the qualitative and participatory methods examined social indicators. Thus a cross-sectional study was carried out to collect both quantitative and qualitative data from small and medium manufacturing industries that had borrowed from MFIs in Eastern Uganda. The quantitative data included SMEs business profitability, stock, capital and employment levels while qualitative information characterized opinionated and contextualized information obtained from key stakeholders. The gathered data was analyzed using data analysis package.*	*This section has been improved and the research design incorporates both quantitative and qualitative data collected. Qualitative data has been included to augment the quantitative analysis. The section on methodology from page21 Shows this.*
8	The researchers should articulate the sampling procedure and design. The Data analytical techniques presented in the methodology section are for the quantitative study only and not for qualitative as earlier indicated in the research design. Delete the concept of qualitative study from the report or go back to the field and undertake a qualitative research study if you deem it necessary.	*For qualitative data, purposive sampling was adopted for the MFIs and with the employment of key informant interviews analysis was done. So the section was reworked and improved accordingly*
9	Provide a detailed section on validity and reliability which is grounded on theory. This section is critical and essential since the researchers have a tendency of confusing constructs. Relate the theoretical part to the results of the data with a proper interpretation.	
10	The results of the study (section 4) do not address the purpose of the study, study objectives and study	*The challenge of the microfinance service delivery construct has been addressed by*

	Hypotheses. There is need to have a second look at the data, isolate constructs that address the purpose of the study, the study objectives and the study Hypotheses with clear conceptualization. Then, re-analyse the data and re-write the section.	*clarifying the variables that define the influencer construct as the financial and non-financial products/services. This has been improved accordingly both in the methodology and the section for results*
11	The results in its current form are not credible since they are based on data that ignores the independent variable of "**microfinance service delivery**" and equally important is the dependent variable of "**growth and development of SMEs**" which is largely mis-conceptualized.	*The independent variable "microfinance service delivery" was not ignored but we have clearly stated the variables that define it, which includes all the financial and non-financial products/services such as loans, savings, money transfer and training among others, which were already included in the study structure.*
12	A critical examination and comparison of the constructs under the "**microfinance financial products**" and "**growth and development of SMEs**" presented in the conceptual model on page 13 gives an impression of the presence of collineality issues. The researchers should indicate how these issues were addressed.	*The statistical bias of collineality has been addressed by testing for all statistical biases including collineality and separate models of collinear variables run. Reliability tests were also run as shown in appendix 1*
13	Your recommendations should be systematically derived from the discussion section. Include a section on policy and managerial implications.	*The recommendations have been aligned to the discussions of the findings and beefed up with the outcomes of the dissemination exercise from key stakeholders.*
14	Several references in the text are not found in the references list and vice-versa. References do not follow any format. I would suggest following the APA style of referencing.	*The references in the text and references list have been reviewed, aligned and contextualized accordingly.*
15	The conceptual foundation for developing potential indicators of the study variables is not adequate. Variables are either entered or removed from the study at will without any theoretical justification. An in-depth review of the literature together with a logical analysis of the models available is necessary in order to determine the most suitable dimensions relevant to the study. We need to know the items under each of variables. This is important in order to judge the face validity of the dimensions, to say the least.	*The conceptual foundation for the study has been reviewed and revised and literature as mentioned above.*
16	Final Recommendation: The paper is conceptually weak. Advanced statistical techniques are not a substitute for a strong conceptual foundation. Together with the methodological problems outlined in this report, a major rework on the project is necessary.	*The research team has endeavored to build the theoretical and empirical background of the study. The methodology research design had been reworked to include both the quantitative and quality context*