

**EFFECTS OF MICROCREDIT ON PERFORMANCE OF WOMEN OWNED
MICROENTERPRISES AND HOUSEHOLD WELFARE IN ARUSHA, DAR-ES-
SALAAM AND MWANZA CITIES IN TANZANIA**

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**A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR
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ABSTRACT

Microcredit schemes have been proliferating all over the world. However, although the impact of those schemes on the borrowers' businesses and household welfare is widely contested, the number of women borrowers has been on a sharp increase. This study assessed the effect of microcredit obtained from various sources on the performance of women owned microenterprises and household welfare. Specifically, the study sought to: (a) examine the performance of women owned microenterprises in terms of sales revenue, net profit and business net worth; (b) determine the role of microcredit from various sources in business performance in terms of sales revenue, net profit and business net worth; (c) determine correlations between the selected credit characteristics and business performance in terms of sales revenue, net profit and business net worth; (d) estimate the effects of credit characteristics on business performance in terms of sales revenue, net profit and business net worth; and (e) determine the contribution of microcredit to the households' welfare. The study involved 400 respondents including 217 borrowers and 183 non-borrowers. Data were collected through questionnaire based interviews, key informant interviews and focus group discussions. The results of t-test for mean comparison indicated that businesses of borrowers performed significantly better than those of non-borrowers ($p < 0.01$). Size of credit (Beta = 0.410, $p < 0.001$) and borrowing experience (Beta = 0.195, $p = 0.049$) had statistically significant positive effects on total sales. Also, size of credit had statistically significant positive effect on net profit (Beta = 0.268, $p = 0.004$). Further, size of credit (Beta = 0.308, $p = 0.001$) and repayment period (Beta = 0.399, $p < 0.001$) had significant positive effects on business net worth. It was also found that borrowers had more household assets than non-borrowers. It is concluded that women's participation in microcredit schemes improves the performance of their businesses as well as their household welfare. It is recommended that more efforts should

be made by the government of Tanzania and other stakeholders to expand outreach of microcredit services to women through scaling up Savings and Credit Cooperative Societies (SACCOS).

DECLARATION

I, PAUL JOHN SALIA, do hereby declare to the Senate of Sokoine University of Agriculture that this dissertation is my own original work done within the period of registration and that it has neither been submitted nor being concurrently submitted in any other Institution.

Paul John Salia

(PhD Candidate)

Date

The above declaration is confirmed

Prof. Kim Abel Kayunze

(Supervisor)

Date

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DEDICATION

This thesis is dedicated to my lovely children Gema, Bernard, Mariasperancia and Diana.

May this work inspire their academic journeys.

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LIST OF ABBREVIATIONS

BOT	Bank of Tanzania
BRAC	Bangladesh Rural Advancement Committee
ECLOF	Ecumenical Church Loan Fund
FGD	Focus Group Discussion
FINCA	Foundation for International Community Assistance
FOCCAS	Foundation for Credit and Community Assistance
FSDT	Financial Sector Deepening Trust
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
KREP	Kenya Rural Enterprise Programme
ME	Microenterprise
MFI	Microfinance Institution
NBS	National Bureau of Statistics
NEDF	National Enterprise Development Fund
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organization
NMB	National Microfinance Bank
NSGRP	National Strategy for Growth and Reduction of Poverty
OCGS	Office of Chief Government Statistician
PRIDE	Promotion of Rural Initiative and Development Enterprise
SACCOS	Savings and Credit Cooperative Societies
SEDA	Small Enterprise Development Agency
SME	Small and Medium Enterprise
TZS	Tanzanian Shilling
URT	United Republic of Tanzania
VICOBA	Village Community Bank

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to the Research Problem

In recent years, the number of women involved in entrepreneurial activities in Tanzania has been on the increase. According to current national baseline survey for micro, small and medium enterprises, 54.3% of small business owners in Tanzania were female (URT and FSDT, 2012). Nonetheless, women owners of microenterprises in Tanzania have limited access to credit, especially from mainstream financial services providers like banks (URT and FSDT, 2012; Kuzilwa, 2005; ILO, 2003, Rweyemamu *et al.*, 2003). According to a 2012 National Micro, Small and Medium Enterprises (MSME) survey, only 10.6% of micro and small businesses owners in Tanzania had accessed credit services from the banking sector (URT and FSDT, 2012). As a result, women micro-entrepreneurs rely on Microfinance Institutions (MFIs) as one of the viable sources of credit. This is evidenced by the sharp increase in the proportion of women beneficiaries of MFIs services in Tanzania from 43% in 2005 to 81% in 2009 (Mixmarket, 2010).

Although credit is an important source of capital to finance women owned microenterprises in Tanzania, most of those enterprises are capital constrained (Martijn and Daan, 2012). Evidence from a study by the International Labour Organization (ILO, 2003c) shows that 67% of women enterprises in Tanzania use their meagre savings to start up their businesses. Due to limited financial capacity of MFIs, women owners of microenterprises depend also on credit from other informal sources including local money lenders, who unfortunately offer credit with stringent conditions like exorbitant interest rates, short repayment periods and small sizes of loan. The stringent lending conditions affect the performance of women owned microenterprises.

A study by Kayunze *et al.* (2005) revealed that high interest rate on microloans was one of the constraints to financial stability of microenterprises in the southern highlands of Tanzania. Further, findings of a survey of microenterprises in Dar es Salaam, Arusha, Mwanza, Kilimanjaro and Tanga revealed that some of the women owners of microenterprises failed to make weekly repayment instalments from incomes generated by their businesses, a situation which forced them to borrow from multiple other sources (Salia *et al.*, 2010).

At this point it is important to note that empirical literature on the role of microcredit in the performance of borrowers' business and household welfare is inconclusive. Specifically, two opposing groups of scholars have emerged, and the central question is: does microcredit contribute to improved business or household welfare of the borrowers? The first group subscribes to a widely held view that credit, as a source of capital for business, is a liberating tool that can be used by the very poor to fight against poverty (Yunus, 1999, 2001, 2009; Buckley, 1997; Gatewood *et al.*, 2004; Kuzilwa, 2005; Lakwo, 2007; Mduma and Wobst, 2005; Ojo, 2009; World Bank, 2001; Khandker, 2003). Yunus (1999), for instance, is convinced that there is a direct and obvious relationship between participation in microcredit schemes and poverty alleviation through income creation. According to him (Yunus, 1999), the poor are poor because they lack credit.

The second group (Bateman and Chang, 2009; Dichter and Harper, 2007; Lont and Hospes, 2004; Mahjan, 1998; Mosley and Hulme, 1998; Adams and Von Pischke, 1992) takes quite an opposite stance. The group subscribes to a radical standpoint that credit exacerbates poverty among the very poor. This view is supported by Mahjan (1998) maintaining that credit should not be given to the very poor but to less poor and non-poor who can undertake medium and large scale enterprises.

This study was conducted with realization that microcredit, especially because of stringent conditions, can increase burden on the very poor, as posited by the opponents of microcredit schemes, but questioned whether that has always been the case. Also, the study was conducted with recognition of the strengths of the supporters of microcredit schemes that credit can improve business performance and household welfare but questioned whether any kind of credit could achieve the same. The study was, therefore, set to assess the effect of microcredit on both business performance and household welfare in the context of Tanzania. The household welfare approach in analyzing the effect of microcredit was taken into account on the realization that there was fungibility of resources within households as well as in the use of credit and profits generated by credit across a range of household production and consumption activities (Sebastad and Chen, 1996).

1.2 Statement of the Problem

Tanzania witnessed proliferation of providers of microcredit services in the 1990s and 2000s decades (Mixmarket, 2010). Those providers include commercial banks, community banks, MFI companies, Non-Governmental Organizations (NGOs), Savings and Credit Cooperative Associations (SACCOS), Government Programmes, Rotating Savings and Credit Associations (ROSCAS), money lenders and Village Community Banks (VICOBA), among others.

However, while there is a growing body of empirical evidences from across the world showing that microcredit schemes have neither significant effect on the performance of borrowers' microenterprises (Nanor, 2008; Gubert and Raubaud, 2005; Barnes *et al.*, 2001b) nor on their household welfare (Bateman and Chang 2009; Dichter and Harper 2007; Lont and Hospes, 2004; Mosley and Hulme; 1998 Adams and Von Pischke, 1992),

the number of women microcredit clients in Tanzania has been on a sharp increase (Mixmarket, 2010). Particularly, there have been more entrants into various microcredit schemes, and the old ones have continued with repeated borrowing. This study was set to probe into this situation by assessing whether women participation in microcredit schemes in Tanzania contributed to improvement of their businesses and the welfare of their households or not. Focus on women was particularly important because they comprise more than 80% of microcredit clients in Tanzania (Mixmarket, 2010).

1.3 Significance of the Study

This study was important and timely because it addressed pertinent issues regarding increasing women's participation in the proliferating microcredit schemes in Tanzania. The study was important because some previous studies conducted in Tanzania (Kuzilwa, 2005; Kayunze *et al.*, 2005; Kessy, 2009) did not adequately address the contribution of microcredit to the performance of microenterprises and borrowers' household welfare. Those studies focused on the role of credit on farm output (Kuzilwa, 2005), perceptions on whether credit was enriching or impoverishing (Kayunze *et al.*, 2005) and on whether businesses of male participants in credit schemes performed differently from those of their female counterparts (Kessy, 2009). In contrast, this study was set to assess the performance of women owned microenterprises by comparing the recipients and non-recipients of microcredit. The findings of this study make an important contribution to the ongoing academic debate regarding the usefulness of microcredit to borrowers' businesses and their household welfare.

More importantly, the study makes important contributions to the limited literature regarding the effect of credit characteristics on business performance. In particular, the study provides a platform for understanding the extent to which size of credit, interest

rates, repayment durations and borrowing experience affect the performance of women owned microenterprises; relationships which had not been addressed by the previous studies conducted in Tanzania. To this end, the study constructed a model that can be used to estimate the effect of each of the above four credit characteristics on business performance. On this aspect, the findings will be useful to the providers of microcredit services, especially because they provide clues on what kind of credit is more likely to be beneficial to the women borrowers who constitute more than 80% of their clients in Tanzania. Specifically, the findings may help microcredit providers customize their products in such a way that they will guarantee better performance of clients' businesses which will in turn enhance high repayment rates of loans.

Unlike other previous studies conducted in Tanzania, this study endeavoured to construct household asset index so as to show the difference between borrower and non-borrower households in terms of their welfare. The need to take a household welfare approach into account in the analysis was based on the realization that there was fungibility of resources within households as well as in the use of credit and profits generated by credit across a range of household production and consumption activities (Sebstad and Chen, 1996). Findings of this study, therefore, contribute to the attainment of another important milestone in the literature on the social effect of microcredit schemes by showing that borrowers could invest more in household assets than non-borrowers could do.

In terms of policy implications, this study is useful because its findings provide insights that can be used to assess the effectiveness of the implementation of National Microfinance Policy (2000) whose overall objective was to establish an efficient and effective microfinance system to serve low-income people in the society and in turn contribute to economic growth and reduction of poverty. This is possible given that the

study endeavoured to show microcredit contribution to business performance and household welfare. Similarly, the findings have implications on Tanzania's overarching national objectives of reducing poverty through the second phase of the National Strategy for Growth and Reduction of Poverty (URT, 2010).

1.4 Objectives, Research Questions and Hypotheses

1.4.1 Overall objective

The overall objective of this study was to assess effects of microcredit on business performance and household welfare in Tanzania with specific focus on women engaged in microenterprises in the three major cities, namely Arusha, Dar es Salaam and Mwanza.

1.4.2 Specific objectives

- 1) To examine the performance of women owned microenterprises in terms of sales revenue, net profit and business net worth.
- 2) To determine the role of microcredit on the performance of women's microenterprises in terms of sales revenue, net profit and business net worth.
- 3) To determine correlations between the selected credit characteristics and business performance in terms of sales revenue, net profit and business net worth.
- 4) To estimate the effects of credit characteristics on business performance in terms of sales revenue, net profit and business net worth.
- 5) To determine the contribution of microcredit to the households' welfare.

1.4.3 Research questions

The following two research questions address the first and the fifth specific objectives.

- 1) How do women owned microenterprises perform in terms of sales revenue, net profit and business net worth?
- 2) Does women's participation in microcredit schemes improve their household welfare?

1.4.4 Null hypotheses tested

The study endeavoured to test the following six hypotheses for the second, third and fourth objectives. The first hypothesis corresponds to the second objective. The second, third, fourth and fifth hypotheses correspond to the third objective. The sixth hypothesis corresponds to the fourth objective.

- 1) Sales revenue, net profit and business net worth of microenterprises whose owners received microcredit did not differ significantly from those whose owners did not.
- 2) There is no significant correlation between size of loan received and the performances of women owned microenterprises in terms of sales revenue, net profit and business net worth.
- 3) There is no significant correlation between interest rate of loan received and performance of women owned microenterprises in terms of sales revenue, net profit and business net worth.
- 4) There is no significant correlation between repayment period of loan received and the performance of women owned microenterprises in terms of sales revenue, net profit and business net worth.
- 5) There is not significant correlation between the borrower's experience in receiving loans and the performance of women owned microenterprises in terms of sales revenue, net profit and business net worth.

- 6) Credit characteristics including size of loan, interest rate, repayment period and borrowing experience do not have significant effect on business performance in terms of sales revenue, net profit and business net worth.

1.5 Limitations of the Study

Absence of written business records: Many of the women owners of microenterprises interviewed did not keep written records regarding sales, profit or business assets. Due to absence of records, the researcher had to rely on estimates given by business owners. Nonetheless, the respondents had enough experience with their businesses and could state the value of their businesses' outputs for a number of days for the previous week (i.e. one week before data were collected). Further, the researcher asked a number of questions in order to determine average sales per day during the reference week. He also asked several questions in order to estimate the value of the business assets for each respondent.

Limited selection of business performance indicators: Although the performance of an enterprise is a function of a wide pool of factors, this study was limited to three indicators, namely total sales, net profit and business net worth. The researcher realized that there were other conventional business performance measures like Return on Investment (ROI) and Return on Assets (ROA). These were not used for a number of reasons, including lack of written business records and fungibility of business resources. Further, the researcher observed that if the value of what some of women owners of microenterprises called assets were to be subjected to depreciation analysis, they would turn out not being assets at all as their value would be zero at the time of data collection. The above three indicators were considered to be more realistic in the context of microenterprises in Tanzania.

Research Design: This study adopted a cross-sectional research design. The researcher knew that a longitudinal study or randomized controlled study could produce more robust results but could not do so for two reasons. First, a longitudinal or randomized study would require the researcher to make prior selection of control and treatment groups and thereafter make close follow up of both groups for some years. This was not possible given that the Doctoral Programme was limited to a maximum of four years. Second, it would be both unethical and impracticable to set up a control group which would not be allowed to access microcredit services in the whole period of experiment. However, the researcher ensured that both the treatment and comparison groups were carefully selected based on the merits of similar individual and business characteristics so as to create grounds for meaningful comparison.

1.6 Thesis Layout

This thesis is organized in five chapters. Chapter one is on introduction and provides description on the background of the research problem, statement of the problem, significance of the study, objectives and hypotheses. Chapter two provides a review of various theoretical and empirical issues surrounding access to credit, business performance and household welfare. The chapter ends with the conceptual framework used for this study. Chapter three is dedicated to the descriptions and justification for various methodological considerations adopted for this study. Chapter four presents detailed findings for each of the five specific objectives of this study. The chapter also offers discussion on the key findings. Chapter five provides conclusions and recommendations on measures that could be taken by various stakeholders to make women's participation in microcredit more useful to their businesses and household welfare.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Conceptualization of Key Terms

2.1.1 Microcredit

The term, 'microcredit' has been defined differently. It has been used to refer to loans given to very poor people for self-employment projects that generate income, allowing them to care for themselves and their families (Microfinance Summit, 1999), a practice of offering small, collateral-free loans to members of cooperatives who otherwise would not have access to the capital necessary to begin small businesses from commercial banks (Sengupta and Aubuchon, 2008; Hossain, 2002) or as small credit (Grameen credit) that is not based on any collateral or legally enforceable contracts but on trust (Yunus, 2007). It is also defined as an act of extension of small loans to entrepreneurs too poor to qualify for traditional bank loans (Microcredit Summit, 1997).

Microcredit is different from microfinance. According to Hulme (2008) microfinance is the supply of a whole range of financial services to the poor, including microcredit, micro-insurance and micro-savings. This is a different view, what has been termed 'microfinance paradigm shift', from Yunus' Grameen concept where microfinance means exclusively provision of microcredit. Microfinancing is defined as the supply of loans, savings and other financial services to the poor (Hanning, 1999). In this view, the financial services needed by the poor include working capital loans, consumer credit and savings, pensions, insurance and money transfer services. Bliss (2002) defines microcredit to include small size loans with shorter repayment periods whose regulations are flexible and easy to understand. According to him such loans should finance microenterprise activities based on local conditions and needs and for that reason its

clients are expected to be small entrepreneurs and low-income households. Bliss (2002) further emphasises that those loans are used to generate income, develop enterprises or used by the community for social services such as health and education.

In this study, microcredit is defined as small credit whose issuance is not based on any collateral or legally enforceable contracts but on trust (Yunus, 2007). Microcredit, therefore, comprise loans that are issued to individuals or groups of individuals without necessarily demanding for conventional collaterals that are demanded by banks. Although different microfinance institutions operating in Tanzania have different ceilings for what should be the maximum amount of loan under microcredit schemes, this study considers microcredit as any loan that does not exceed TZS 5 million. This ceiling has been taken with the assumption that most of microcredit clients are owners of microenterprises whose capital investment, according to Tanzania's National Microfinance Policy (URT, 2000), is at most 5 million.

2.1.2 Microenterprise

Literature reveals that there is no universally accepted definition for a microenterprise. However, this study adopts Tanzania's SME policy that defines microenterprises as those engaging up to 4 people, in most cases family members and with very limited productive assets of less than 5 million (URT, 2002). This definition distinguishes microenterprises from small, medium and large enterprises. In terms of number of employees; small enterprises have between 5 and 49 employees, medium enterprises have between 50 and 99 employees while large enterprises employ more than 100 employees. In terms of capital investment, small enterprises have invested between TZS 5 and 200 million; medium enterprises have invested between TZS 200 to 800 million and large enterprises have invested above TZS 800 million (URT, 2002). It might be important to add here

that, characteristically, microenterprises (MEs) fall under the informal sector as opposed to medium or large enterprises, which operate under some features of formality.

2.1.3 Business performance

Literature reveals that there is no consensus about what really constitutes business performance. Various indicators can be involved to measure the performance of an enterprise. They include growth, survival, sustainability, stability, profitability and job generation (Srinivasan *et al.*, 1994), business survival, growth in venture's sales and profitability (Shane, 2003), efficiency and innovation (Goedhuys, 1998) as well as human capital factors like the level of education, managerial skills and strategies that the business adapts (Hersey and Blanchard, 1988).

This study focused on three operational measures of business performance as per Shane (2003) namely business survival, growth in venture's sales and profitability. For operational purposes, business net worth was taken as a proxy for business survival and comprised a combination of current and fixed assets. Growth in venture's sales was expressed in terms of total business sales while profitability was taken to be net profit registered by business within a specific period of time. Each of those measures of business performance is defined in details hereunder.

2.1.3.1 Total sales

Total sales revenue is sum of inflow of assets resulting from the sale of products or rendering services to customers (Hermanson *et al.*, 1983). They comprise gross earnings realized by transferring products to customers (Black *et al.*, 1967). Sales revenue is one of the most used frequently business performance measure (Doub and Edgcomb, 2005). It is also noted that sales revenue is one of the vital components in firm evaluation (Jegadeesh

and Livnat, 2006; Penman 2004; Ertimur *et al.*, 2003; Swaminathan and Weintrop, 1991) and, therefore, an important element that lenders have to consider in issuance of credit.

In this study total sales were considered to be the sum of gross income obtained by selling of commodities and services for a specific period of time. This definition was adopted for two main reasons. First, the information on sales could be easily accessible, especially when the time framework was between one week and one month. Second, most of microfinance institutions assessed credit-worthiness of clients based on their total sales per specific period of time, and so it was assumed that clients would easily be able to provide information on the same.

2.1.3.2 Net profit

As a concept, 'profit' could be viewed from economic and accounting perspectives. In the economists' circles profit is defined as gain which a firm could spend or distribute in a specified period of time and still remain with the same amount it started with at the beginning (Bodie *et al.*, 2009). With this approach a firm would be profitable if it could meet business costs and still remain with the same level of capital it started with. In other words, sum of all earnings above the capital invested in the business is considered as profit. Different from the economists, the accountants define profit from income-expenditure point of view. It is excess of revenue over transactions (Stickney and Weil, 2000; Edmonds *et al.*, 2000). It is also defined as what is left after all production costs have been paid (Marriot *et al.*, 2004; Porwal, 2001) or simply as a net income (Nikolai *et al.*, 2009, Edmonds *et al.*, 2000; Larson *et al.*, 1999). Simply put, the accountants define profit as income less expenditure.

In this study, profit was defined from the accountants' income-expenditure perspective. Income was considered to be the total sales per a specified period of time. However, cognizant of the fact that women owners of microenterprises consumed or gave away part of their output, the value of what was consumed or given away was considered to be part of profit. Thus, this study defined profit as sum of sales revenue, value of output consumed by the entrepreneur or her household and value of output given away less total business and operating cost in the last month. Largely, this definition was adopted from Daniels (1999:4) work on "measuring profit and net worth of microenterprises: a field test of eight proxies".

2.1.3.3 Business net worth

Business net worth is total enterprise assets minus its liabilities (Daniels, 1999). According to Barnes (1996), business assets can be classified into three groups namely current assets, fixed assets and human assets. The fixed assets include premises, buildings, utilities, machinery, equipment and tools. The current assets include inventory of finished goods (for manufacturing businesses), raw material, cash, deposit/checking accounts, account receivables and loans. Human assets include management, technical knowledge, skills and the capabilities of household members (Barnes, 1996). Similarly, Little (1997) classifies assets as financial, material, human and/or social. In this context human and/or social assets include knowledge, education and social networks that a proprietor relies on. This study adopts Cohen's definition of net worth i.e. total assets minus liabilities (Daniels, 1999:3). However, unlike Barnes (1996) and Little (1997) the study considered business assets as the value sum of current and fixed assets only.

2.1.4 Household welfare

According to an online Oxford Dictionary, welfare is defined as the state of health, happiness and fortunes of a person or group. Traditionally, household welfare has been measured by money metric measures of income and expenditure. However, starting from the work of Filmer and Pritchett (1998) asset index has become popular. The household asset index, also known as household wealth index in the Demographic Health Surveys (DHS), is currently used to substitute the money metric measures of household income and expenditure. The advantage of using household asset index over income and expenditure variables to determine household welfare is that the former is more realistic as income is not necessarily transformed into household wellbeing (Filmer and Pritchett 1998; Carletto *et al.*, 2000; Sahn and Stifel, 2001).

In this study, asset measure of household wealth was considered to be particularly useful because it does away with the recall problems that may arise on reporting the household income or expenditure. This is particularly so given that the collection of data about assets involves use of simple questions that eventually result into less recall problem (Deaton and Zaidi, 1999). Accordingly, using assets minimizes the chances for errors that could arise due to the fact that prices, which normally used in determining household expenditure, differ substantially across time and location (Deaton and Zaidi, 1999). In the same line, Sahn and Stifel (2001) provide three advantages of using assets index to household income and expenditure data including the fact that (a) household assets are fewer and therefore easier to measure as compared to income and expenditure, (b) assets data are more accurate and valid than income and expenditure data, and (c) asset data are less likely to contain reporting bias as can, sometimes, be verified by the interviewer.

More often, researchers have used the weighted scores of principal component analysis (PCA) to construct household assets indices (Filmer and Pritchett, 1998; Mckenzie, 2003; Mckenzie, 2005; Schellenberg *et al.*, 2003; Vyass and Kumaranayake 2006). Filmer and Pritchett (1998) used principal component analysis (PCA) to construct an asset index for Indian states using data from National Family Health Survey for a number of years. The results of this study revealed that the constructed assets index was robust and corresponded with previous State Domestic Product and poverty rate data (Filmer and Pritchett, 1998).

2.2 Theoretical Framework

Microcredit from MFIs is an important external source of capital that can enhance the performance of women owned microenterprises. This is so because women entrepreneurs, whose majority start business out of their own savings (ILO, 2003) fail to generate enough capital internally and thus have to borrow. Considering the importance of the external source of capital to women owned microenterprises' performance, this study adopted resource-based entrepreneurship theory.

Resource-based theory of entrepreneurship contends that access to resources by founders is an important predictor of opportunity based entrepreneurship and new venture growth (Anderson and Miller, 2003; Davidson and Honing, 2003; Shane, 2003; Alvarez and Busenitz, 2001; Shane, 2000; Shane and Venkataraman, 2000; Aldrich, 1999). This theory stresses the importance of financial, social and human resources (Aldrich, 1999). According to this theory, access to resources enhances the individual's ability to detect and act upon discovered opportunities (Davidson and Honing, 2003). However, empirical evidences suggest that some individuals are more able to recognize and exploit opportunities than others because they have better information and knowledge than others

(Aldrich, 1999; Shane 2000, Shane, 2003; Anderson and Miller, 2003; Shane and Venkataraman, 2000). Thus three types of resources including financial capital, human capital and social capital have been advanced in the resource-based entrepreneurship theory. This study, however, was confined to one type of resources namely financial capital; whose relevance is discussed hereunder.

The resource based theory of entrepreneurship suggests that people with financial capital are more able to acquire resources to effectively exploit entrepreneurial opportunities, and set up a firm to do so. Research has showed that the founding of new firms is more common when people have access to financial capital (Blanchflower *et al.*, 2001; Holtz-Eakin *et al.*, 1994; Evans and Jovanovic, 1989). In the context of this study, credit from various sources including microfinance institutions (MFIs), banks and money lenders constitute financial capital needed by women owners of microenterprises to propagate their already existing businesses or start up new ones. Given that most of women owners of microenterprises in Tanzania start their businesses out of their own savings (ILO, 2003) participation in microcredit schemes provides women entrepreneurs with capital to expand their businesses by enabling them to purchase more tradable goods and services. It is against this background that microcredit is considered to be an important input to an overall business performance measured in terms of increased volume of sales, net profit and net business worth.

An important point to note is that although this theory has been challenged with evidence that most founders start new ventures without much capital, and that financial capital is not significantly related to the probability of being nascent entrepreneurs (Hurst and Lusardi, 2004; Kim, Aldrich and Keister, 2003; Davidson and Honing, 2003; Aldrich, 1999), still in the context of Tanzania microcredit is a common source of capital to

women owners of microenterprises. This is evidenced by the fact that more than 80% of MFI clients are women (Mixmarket, 2010).

2.3 Providers of Microcredit Services in Tanzania

Principally, there are three main types of providers of microcredit services namely informal, semi-formal and formal. Informal credit is loan which is provided by various credit providers, including informal money lenders, rotating savings and credit associations (ROSCAs), and part-time money lenders, including relatives, neighbours, friends, traders, and large scale farmers (Hulme and Mosley, 1996; Kashuliza *et al.*, 1998). Semi-formal credit providers are the organizations and agents whose mission is not basically financial service provision, such as NGOs, government departments and religious organizations (Kashuliza *et al.*, 1998). Formal credit providers comprise mainstream financial institutions, especially banks (Kashuliza, *et al.*, 1998).

It is worth noting that although the three types of credit providers are defined separately above as if they were quite discrete types, each of them is best viewed as lying somewhere along a continuum that separates complete formality and complete informality (Buckley, 1997). Some of the providers of microcredit services in Tanzania include the following organizations.

NGOs MFI: There are a number of MFIs in this category. They include, among others, PRIDE Tanzania, FINCA, Presidential Trust Fund (PTF), Small Enterprises Development Agency (SEDA) and Youth Self Employment Foundation (YOSEFO).

Limited liability Companies: These are limited liability companies which specialize in Microfinance Services and are new players in the Tanzanian market. Just like

NGOs, their services are not regulated. Some of those companies include Tujijenge Tanzania Ltd, Freedom Finance Ltd, Opportunity Finance Ltd and many others in different parts of Tanzania.

Commercial Banks and Community Banks: These institutions provide a wide range of microfinance services to their clientele. The services include micro loans, savings products and wholesale credit funds to SACCOS. With regard to loan collateral, they use chattel mortgage and peer pressure through solidarity groups. The institutions include Akiba Commercial Bank (ACB), CRDB bank, Mufindi Community Bank, National Microfinance Bank (NMB), Mbinga Community Bank, Dar es Salaam Community Bank, Mwanga Community Bank, Kilimanjaro Cooperative Bank, Kagera Cooperative Bank and Tanzania Postal Bank among others.

Savings and Credit Cooperative Societies (SACCOS): These comprise formal mechanism whereby financial resources are mobilized from members. In these societies, the members constitute the main beneficiaries and the management is also in the members' hands. SACCOS are registered under the cooperatives law get funds for lending to members from internally mobilized savings and loans from Commercial banks, Community Banks and Government programmes such as Small Enterprise Loan Facility (SELF).

Informal financial services providers: Informal providers are neither legally constituted nor regulated by any institution. These providers deliver savings, credit and micro insurance services. In Tanzania they include Rotating Savings and Credit Associations (ROSCAs), Accumulated Savings Credit Associations, Burial

Associations (micro insurance services), Money Lenders and Traders, Self Help group (SHGs) and Village Community Banks (VICOBA), among others.

Government programmes and projects: Local governments including District, Municipal, and City Councils have established youth and women funds for lending. The councils are required by law to set aside 10% of the revenue to provide loans to women and youth who want to establish or expand their businesses. Other similar initiatives are ones by the Central Government which provides microcredit services through SELF Project and Presidential Trust Fund. An important feature of the government initiatives is that they provide loans with subsidized interest rates.

2.4 Access to Credit and Business Performance

The importance of credit to the performance of women owned microenterprises can be traced back to the 1970s in Muhammad Yunus' own words when he wrote: "Giving the poor access to credit allows them to immediately put into practice the skills they already know – to weave, husk rice paddy, raise cows and peddle a rickshaw. And the cash they earn is then a tool, a key that unlocks a host of other abilities and allows them to explore their own potential" (Yunus, 1999: 140).

However, women entrepreneurs in the developing countries do not have an easy access to credit for their entrepreneurial activity (Ibru, 2009; Iganiga, 2008; Okpukpara, 2009; Lakwo, 2007; May, 2007; Iheduru, 2002; Kuzilwa, 2005). Various authors have posited that poor people, just like some of the women owners of microenterprises in Tanzania could be, are excluded from accessing credit services especially from banks (Hulme and Mosley, 1996; Navajas *et al.*, 2002; Dataa, 2004). One of the common views among these authors is that the extremely poor people easily dropout of credit programmes after failing

to keep up with repayment instalments. Other factors that have been found to constrain the poor from gaining access to microcredit include income poverty, unemployment, household poverty and inability to save (May, 2009; Otero, 1999; Porter and Nagarajan, 2005; Roomi and Parrot, 2008).

In Tanzania, for instance, the recent National MSME survey revealed that only 10.6% of micro and small businesses owners had accessed credit services from the banking sector (URT and FSDT, 2012). The study further revealed that 10.9% of micro and small business owners obtained credit services from semi-formal financial providers like microfinance organizations, SACCOS and mobile phone payment companies. Accordingly, it was shown that 12.1% of micro and small business owners had obtained credit from informal sources including ROSCAs, VICOBA, family friends, traders and money lenders. Further, the study showed that about two-thirds (66.4%) of micro and small business owners were completely excluded from financial services.

The literature shows that there are various factors that can explain reasons for limited access to credit services among women entrepreneurs in Tanzania. According to Rweyemamu *et al.* (2003), formal financial institutions have failed to serve low income and their enterprises both in urban and rural areas of Tanzania. Marginalization of MEs by commercial banks is caused by demand for conventional collateral, credit rationing, preference for high-income clients and large loans as well as bureaucratic and lengthy procedures of providing loans (Rweyemamu *et al.*, 2003). The authors observe that these factors keep most of the low income earners outside the boundary of the formal sector financial institutions in developing countries. A similar view is demonstrated in the literature (Aikaeli, 2012; Nchimbi, 2002) noting that microenterprises owners, especially women, cannot easily borrow from commercial banks due to lack of collaterals which are

demanded in the process of loan application. As a result, the only viable sources of business financing among women entrepreneurs, especially in Africa, are credits from micro-finance institutions (Ibru, 2009; Kuzilwa, 2005). However, it is worth noting that due to limited financial capacities of most of MFIs operating in Tanzania, not all women owners of microenterprises could access microcredit from MFIs, and so they were circumstantially forced to obtain the same from other sources including local money lenders.

Studies on the effect of microcredit on the performance of microenterprises have produced mixed findings. Some of those studies revealed that microcredit had positive effect while others showed that the same had negative effect on various business performance indicators. Further, some of the studies revealed that participation in microcredit schemes resulted in both negative and positive effect on the borrower's business. The following subsequent paragraphs present evidences of the studies that found that credit had positive effect of business and later on those studies that concluded otherwise.

A study conducted in Uganda to assess the impact of three microfinance institutions including FINCA, Foundation for Credit and Community Assistance (FOCCAS) and PRIDE revealed that microcredit clients were likely to have more sources of income than non-clients except for the poorest households (Barnes *et al.*, 2001a). Specifically, the study found out that microcredit clients were more likely to have diversified their businesses both horizontally by adding up new products or services to their current businesses and vertically by starting new business than the non-clients.

Another study conducted in southern India found out that microfinance services were helping new businesses to start up (Banerjee *et al.*, 2009). According to this study “one new microfinance loan in five generated a new business that would not otherwise have been created”. It was also found out that credit beneficiaries increased the purchase of durable goods including television, bicycles and refrigerators and reduced the purchase of non-durable goods or what they called “temptation goods”.

A few studies that have been conducted in Tanzania have emerged with findings suggesting that credit has positive effect on the performance of small and microenterprises. For example, Kuzilwa (2005) conducted a study on the role of credit for small business success with a specific focus of the National Entrepreneurship Development Fund in Tanzania. Adopting a combination of case studies with a sample survey of businesses that had gained access to credit from a Tanzanian government financial source, the study revealed that access to credit had substantially increased farm output. Further, the findings indicated that the enterprises whose owners had received business training and extension advice performed better than those that had not.

Similarly, a study was conducted to assess whether credit enriches or impoverishes covering Mbeya and Iringa regions in Tanzania and found that 79.8% of respondents indicated that credit was reducing poverty and therefore enriching (Kayunze *et al.*, 2005). Using t-test, the authors established that the incomes of borrowers had increased significantly after participating in borrowing schemes. The study further showed that borrowers had positive attitudes towards credit, meaning that they had benefited from the same, a fact that indicates that they would be willing to continue borrowing. Such income had been useful in maintaining household welfare.

Another study which was conducted in Tanzania sought to find out the effect of microfinance services on enterprise performance questioning whether gender had any influence (Kessy, 2009). The survey involved 255 micro and small enterprises (MSEs) supported by loan from MFIs from four regions of Dar es Salaam, Mwanza, Arusha and Mbeya in Tanzania. Using three performance measures including sales revenue, number of employees and assets level for comparison, it was found that the female owned enterprises demonstrated a slightly lower level of growth compared to enterprises owned by male entrepreneurs. Particularly, the study showed that male owned enterprises had higher levels of assets, sales revenue and number of employees compared to female owned enterprises.

However, a number of studies have shown that participation in microcredit schemes has no impact on the business wealth. A study conducted in Ghana covering four districts found that the longer a client stayed in a microcredit scheme the worse their businesses' profits became (Nanor, 2008). In this view, repeated participation in credit cycles would make the business less profitable. Simply put, the higher the frequency of borrowing, the lower the profit from the business. Similar evidence is reported in Madagascar where microcredit did not enhance business growth among clients but rather made those businesses worse than those of non-clients (Gubert and Raubaud, 2005). Furthermore, a study conducted in Zimbabwe with the purpose of determining the impact of microcredit from ZAMBUKO Trust indicated that participation in a microcredit programme did not have any effect on the value of fixed assets in clients' businesses (Barnes *et al.*, 2001b).

Given the above background, it is clear that microcredit is an important source of financial capital to women owned microenterprises in Tanzania. As a source of capital, microcredit is vital in both starting up new businesses and in propagating the already

existing ones. Cognizant of the role of credit on the performance of those microenterprises, this study put forward the following null hypothesis:

H₁: Sales revenue, net profit and business net worth of microenterprises whose owners received microcredit did not differ significantly from those whose owners did not.

2.5 Credit Characteristics and Business Performance

2.5.1 Role of size of credit

Lack of capital is one of the major constraints against growth of women owned microenterprises. It is on this background that Coleman (2001) observes that without sufficient capital, micro and small firms are unable to develop new products and services or grow to meet market demand. However, microcredit has always constituted small-size-loans (Mosley and Hulme, 1998; Morduch 2000; Ghatak and Guinnane, 1999) which can hardly suffice the actual business needs to grow or expand.

The contribution of optimally large size of loans to the performance of microenterprises cannot be overemphasised. According to Godquin (2004), there is linear relationship between size of loan and profit that a firm can make as a result of borrowing. The author underscores the contribution of size of loan particularly focusing on what the same can do to increase business returns and investment. She notes “as the net return is an increasing function of the size of the loan, the borrower always prefers bigger loans and therefore asks for the largest loan size she may apply for, given the set of projects within her reach as defined by her own characteristics, those of her environment, and those of her lending group” (Godquin, 2004: 1911).

Vogelsang (2001) studied the impact of loan size on the performance of the clients' enterprises in Bolivia using data from one of the microfinance institutions called Caja Los Andes. Basing on the information from 76 000 clients and 28 000 rejected loan applicants, the author found that clients with average higher loan size generated higher revenues than those with lower loan size. Accordingly, the study found out that those with average higher loan size has higher level of assets than those with lower average loan size.

Coleman (1999, 2001) studied microfinance programmes in Thailand and found out that those programmes had insignificant or negative impact on the borrowers' household wealth. According to this author, those loans had negative effect because they were too small in size to make investments in business and thus were used for consumption. Further, the author observed that the borrowers became even poorer because they had to turn to money lenders to finance the repayment.

Otieno *et al.* (2011) conducted as study in Kisii County in Kenya to assess the effect of provision of micro finance on the performance of microenterprises focusing particularly on microenterprises under Kenya Rural Enterprise Programme (K-REP). The study, found that the size of loan given to majority of borrowers was too small to facilitate significant investment in businesses. The study also found out that loan amounts disbursed to the majority of applicants (respondents) were less than the amount applied for. The authors concluded that, due to inadequately small loans, youth microenterprises were not able to grow to small and medium size enterprises.

At this point it is important to note that all of the above studies confirm the fact that financial constraints, due to limited loan amounts by MFI, prevent firms from making

enough investment in their businesses thus leading to depressed growth, productivity and eventually their survival (Carreira and Silva, 2010; Musso and Schiavo 2008; Parker and Van Praag, 2006). Cognizant of the contribution of size of credit in business performance, this study established the following null hypothesis.

H₂: There is no significant correlation between size of loan received and the performances of women owned microenterprises in terms of sales revenue, net profit and business net worth.

2.5.2 Interest rate and business performance

Microenterprise owners, especially in the developing countries, have limited access to credit from formal sources. Banks, which offer relatively low rates compared to MFIs and moneylenders, continue to favour large-scale businesses and neglect the poor potential entrepreneurs on the basis that the latter do not have conventional collaterals to guarantee for the loan they request for. A study by Banerjee and Duflo (2006), covering a total 13 developing countries, revealed that only 6% of the borrowings of poor people came from formal sources. According to them, 94% of the borrowed funds by the poor came from money lenders, friends and merchants. Given this situation, it turns out that the only viable sources of credit to women owners of microenterprises are the microfinance institutions (MFIs) and sometimes money lenders who unfortunately attach their loans with high interest rates.

However, MFI loans have always been attached to high interest rates. Specifically, high interest rates on microcredit are typical in the so called ‘new wave MFIs’ where financial services have been commercialized (Huq, 2004). For instance, Bateman (2009) found out that women borrowers from one of Mexico’s MFI called Compartamosbanco were paying a high interest of around 90-100%.

Literature suggests that MFIs associate their loan products with high interest rates in order to meet the operating costs and to achieve financial sustainability. In order to achieve financial sustainability and, arguably be able to reach more poor people with microloans, MFIs have to attach their loan products with high interest rate so as to gain profit (Roodman, 2011; Rosenberg *et al.*, 2009; Ruben, 2007). According to Roodman (2011), the impact of high interest rates has to be judged against the possible harm of poor people having no access to credit at all. Explaining why small loans should be attached to high interest rates; Rosenberg, Gonzalez and Narain (2009:1) note “lending \$100 000 in 1,000 loans of \$100 each will obviously require a lot more in staff salaries than making a single loan of \$100 000”.

Ruben (2007) explains the reason why MFIs have to attach their loan with high interest rates. The author argues that MFIs have to hinge the credit products with high interests so as to be able to meet the high administrative costs associated with small loans. According to him, the interest rates of 30 to 50% or more offered by MFIs were low compared to that which is offered by local money lenders. While this is classical explanation around high interest rate offered by MFIs, the argument put forward by this study is that those rates are too high to really make it possible for borrowers to expand their businesses through increased volume of tradable goods and services, make investment on productive assets and eventually earn profit.

High interest rates can prevent the poor from borrowing. This may happen when those interest rates prevent investment in activities that produce high returns (Fernando, 2006). This is clear when the author notes that “only those who can generate a sufficiently high surplus of funds can afford high interest rates on microcredit. More specifically, a borrower's realized rate of return on investment needs to be greater than the interest rate

to service the loan” (Ferdinando, 2006: 7). In fact, loans with high interest rates could have devastating effects on the borrowers when the same are used to facilitate consumption rather than business investment. For instance, women owners of microenterprises were likely to be unable to repay loans with high interest rates given that they tend to invest the borrowed money in other activities like children’s health, education and basic needs than in business (Stewart *et al.*, 2010).

Further empirical evidence suggests that high interest rates offered by MFIs were the reason why microfinance services have not been able to improve the clients’ wellbeing, particularly in the sub-Saharan region (Stewart *et al.*, 2010). The authors observe that “the poor borrowers are made poorer not richer, and because their businesses do not produce enough profit to compensate for the high interest rates, the poor do fail to repay loan and may fall into a debt trap” (Stewart *et al.*, 2010: 49). Higher interest rates, therefore, were among the causes of indebtedness among MFI borrowers. In a study conducted in Ghana by the Centre for European Research in Microfinance, Schicks (2011) it was found that high interest rates were one among leading reasons for borrowers’ indebtedness among the interviewees. In Tanzania, high interest rate on microloans has been found to constrain financial stability of microenterprises. For instance, Kayunze *et al.* (2005) list high interest as one of the constraints against borrowing other than lack of collateral by the poor. Nonetheless, women owners of microenterprises in Tanzania go on borrowing from MFIs in spite of the high interest rates. Engagement in loans with high interest rates means that women borrowers would have little returns on their businesses, the fact that will in turn limit business performance in terms of investment in assets, profit and hired labour force. On the basis of these arguments, the study establishes the following null hypothesis.

H₃: There is no significant correlation between interest rate of loan received and performance of women owned microenterprises in terms of sales revenue, net profit and business net worth.

2.5.3 Repayment period and business performance

Generally, the beneficiaries of microcredit schemes, especially where Grameen bank's solidarity group lending applies, experience short repayment time which often starts one week after loan disbursement. Mosley and Hulme (1998) note that frequent repayment scheme is used by MFIs to reduce repayment insecurity. According to them, advantage of this scheme is that it screens out the undisciplined borrowers, thus giving early warning to loan officers and group members. In the same vein, Armendáriz and Morduch (2005) argue for tight repayment schedule showing that flexible repayment contributed to high default rate among microcredit clients in Bangladesh. However, it is important to note that short repayment period means that borrowers have to start repayment before making any investment.

Scanty literature available on the role of repayment period and business performance suggests that there is positive correlation between more flexible repayment period and business performance. Field and Pande (2008) conducted a study to evaluate the effect of weekly repayment in a microfinance institution called Village Welfare Society in Calcuta, India. In this study, borrowers were randomly assigned to one of three conditions: usual weekly reimbursement starting immediately after loan disbursement, monthly reimbursement, or weekly reimbursement starting a few weeks after the loan started. The findings revealed that the group which was given a gap of a few weeks was more likely to start a business, and when they started a business they were more likely to make a bigger investment than one that only started repaying after a while. Particularly, women

borrowers who started loan repayment after a few weeks were less likely to buy saris for resale and more likely to invest in productive assets like acquiring a sewing machine.

In another study involving 845 clients of a microfinance institution called “Village Financial Services” in Kolkata India, Field *et al.* (2011) found that immediate repayment obligation distorted investment in microenterprises financed through credit. The study further found out that longer grace period had positive effect on profit and investment in business but could increase delinquency.

At this point it is important to recall that the ideal advantage of tightly short repayment schedule is that it may screen out the undisciplined borrowers, thus giving early warning to loan officers and group members (Mosley and Hulme, 1998). However, short repayment period meant that borrowers were to start paying back the borrowed money before making any investment. Particularly, short repayment time may not favour women who borrowed to start up new businesses because repayment was to begin before there were returns on investment. Based on this background, this study put forth the following null hypothesis:

H₄: There is no significant correlation between repayment period of loan received and the performance of women owned microenterprises in terms of sales revenue, net profit and business net worth.

2.5.4 Borrowing experience and business performance

Literature consistently shows that women operators of MEs have limited experience with credit and other microfinance services. In essence, this is closely related to limited access to credit among them (Ibru, 2009; Iganiga, 2008; Iheduru, 2002; Kuzilwa, 2005; Lakwo, 2007; May, 2007; Okpukpara, 2009). Limited experience with credit is likely to lead to

limited use of other related microfinance services as well (Karnani, 2007). This view is reinforced by Shane (2003) arguing that “the ability of women to make use of the opportunities provided by microfinance services to ensure enterprises’ performance depends on the attitude to risk”.

The duration of participation in credit scheme, therefore, is an important factor to consider while assessing the effect of microcredit scheme. However, available empirical evidence shows a mix of results with regard to usefulness of credit and duration of participation in a credit scheme. A study conducted in Zimbabwe showed that households of clients who had participated for long time were likely to fall into poverty than non-clients (Barnes *et al.*, 2001b). For instance, findings of a study conducted in Ghana revealed that women-clients of microcredit schemes were more likely to purchase assets like refrigerators and sewing machines than non-clients although the duration of participation did not matter (Adjei *et al.*, 2009). Another study conducted in Uganda on microfinance, rural livelihood and women empowerment revealed that microcredit did improve the wellbeing of clients relative to that of non-clients but those gains were reducing as time for participation increased (Lakwo, 2006). The study observed that those clients who had been involved for more than three years saw very negligible value-addition to their wellbeing. Those findings, therefore, led to conclusion that longer participation in microcredit schemes was likely to increase the burden of poverty on rural population.

Nevertheless, in this study it was assumed that women operators of MEs with repeated borrowing experience (i.e. those with higher frequency of borrowing) were more likely to use credit for effective business performance. This was because many MFIs did not provide enough and relevant business education to their clients, especially on the use of

credit for business performance and so the clients gained experience as they participate in continued borrowing. With due consideration of the importance of credit experience, this study put forth the following null hypothesis:

H₅: There is not significant correlation between the borrower's experience in receiving loans and the performance of women owned microenterprises in terms of sales revenue, net profit and business net worth.

2.6 Microcredit and Household Welfare

Literature on the role of microcredit on household welfare is largely inconclusive. In fact it reveals that there has always been a sharp division on the role of credit on household's poverty reduction and ultimately welfare. On the one hand there is a large body of empirical literature on microcredit showing that microcredit can play a very big role in reducing poverty (Yunus, 1997; Sanyang and Huang, 2008) and that it has improved both economic and social wellbeing of the beneficiaries (Woller and Parsons, 2002; Wurdnmann 1998, Selejio 2002, Mduma and Wobst 2005). For instance, Yunus (1997), who is one of the strong supporters of this view, was convinced that there is direct and obvious relationship between participation in microcredit schemes and poverty alleviation. According to him, the poor were poor because they lacked reliable sources of finance.

On the other hand a number of other authors have fiercely criticized what they claimed to be an over stated impact of microfinance on poverty reduction indicating that the given evidences were seriously flawed (Bateman and Chang 2009; Dichter and Harper 2007; Lont and Hospes, 2004). According to Lont and Hospes (2004), all those evidences are 'a world of make-believe'. Yet, Bateman and Chang (2009), in their famous paper on "Microfinance Illusion", strongly argue against social and economic impact of

microfinance. They write: “We see a growing number of reasons to believe that microfinance may actually be undermining attempts to establish sustainable economic and social development, and so also sustainable poverty reduction. Microfinance may even constitute a new and very powerful form of poverty trap” (Bateman and Chang, 2009: 4). Mahjan (1998) completely rejects the idea of providing the poor people with credit arguing that microcredit schemes are based on wrong assumptions that the poorest wish to be self employed and that credit is the main financial service needed by the poor. Nevertheless, it is important to acknowledge the fact that quite a number of studies have revealed that participation in microcredit schemes results into poverty reduction among the clients.

Khandker (2003) tracked microfinance and poverty indicators for Bangladesh for a period of two years starting from 1991 to 1992 and found that microfinance reduced both moderate and extreme poverty among clients and non-clients but much more on the former. Among clients, moderate poverty was reduced by 1.6% per year while extreme poverty was reduced by 2.2% per year. Among non-clients, moderate poverty was reduced by 1.0% and extreme poverty by 1.3 per year. The author concluded that microcredit was responsible for 40% reduction of moderate poverty in rural Bangladesh and that the impact was much stronger among female borrowers than among male borrowers.

A study of ASHI programme in Philippines by CASHPOR Technical Services, involving 152 ASHI clients and 90 non-clients showed that poverty had decreased among microcredit clients. The percentage of very poor clients decreased from 76% to 13% indicating that most clients had moved from being extremely poor to being moderately poor. The percentage of very poor non-clients decreased from 76% to only 49%.

Accordingly, the study found out that 22% of clients had completely moved out of poverty by owning valuable productive assets like machinery, vehicles and livestock and better houses (Todd, 2000).

Similarly, a study conducted in Tanzania revealed that credit was enriching the clients of microfinance institutions (Kayunze *et al.*, 2005). Essentially, the study found that incomes of borrowers had increased significantly after participating in borrowing schemes. It was also shown that clients were ready to continue borrowing; something that gave an indication that they were benefiting from those loans. Based on the fact the authors concluded that loans were reducing poverty among MFI clients.

Particularly, more convincing evidences have emerged when the approach was to determine the contribution of microcredit on household welfare as opposed to poverty *per se*, a concept which is multidimensional by its very nature. It should be noted here that inclusion of household welfare in the analysis of the effect of microcredit is based on the realization that there is fungibility of resources within households as well as in the use of credit and profits generated by credit across a range of household production and consumption activities (Sebstad and Chen, 1996). The following are results of the studies which used household welfare approach to assess the impact of microcredit schemes.

A number of studies showed that there were differences between clients and non-clients of microcredit schemes in terms of ownership of household assets. In Ghana clients' households had more to spend on non-food items than non-client households (Nanor, 2008). Another study in Ghana revealed that there was positive and significant relationship between women's participation in microcredit schemes and household ownership of assts like sewing machines and refrigerators. (Adjei *et al.*, 2009). Similarly,

the findings of a study in Rwanda (Lacalle *et al.*, 2008) revealed that credit clients purchased significantly more clothes than non-clients. Empirical evidences from Uganda and Zanzibar showed that microcredit clients were able to access more household assets like mattresses, radios, stoves and beds than non-clients beds (Barnes *et al.*, 2001a; Brannen, 2010). Specifically, this study revealed that female clients were more likely to invest in household assets than their male counterparts. Similarly, evidences from a study conducted in South Africa showed that households of microcredit clients were better off in terms of the value of household assets (Pronky *et al.*, 2008).

Participation in microcredit schemes had positive influence on expenditure on children's education, enrolment and attendance. A study conducted in Ghana showed that participation in microcredit schemes increased client households' expenditure on children's education (Adjei *et al.*, 2009). However, the authors found that length of participation in those programmes did not have significant effect on that expenditure. Similarly, a study conducted in Rwanda showed that participation in credit programme increased household's expenditure on education (Lacalle *et al.*, 2008). This study showed that the percentage of clients' children in schools was higher than those of the non-clients. It also revealed that microcredit clients were more likely to be able to pay all school fees for their children in schools than the non-clients.

Another study conducted in Zimbabwe revealed that participation in micro-credit had positive effect on the proportion of boys' (aged 6 to 16 years) enrolment to primary school but not on girl's enrolment especially among the extremely poor clients (Barnes *et al.*, 2001b). The study further revealed that the proportion of girls aged 6 to 16 years decreased more for continuing clients than for the departing and non-clients (Barnes *et al.*, 2001b).

On the contrary, however, there is evidence showing that participation in microcredit schemes had negative effect on school enrolment, attendance and even expenditure. A study in Malawi showed that participation in microcredit scheme significantly decreased primary school attendance among borrowers' children leading to repetitions of primary grades for young boys and delayed or lack of enrolment for young girls (Shimamura and Lastarria-Cornhiel, 2009). Another study in Uganda showed that clients were significantly more likely to be unable to pay school charges for one or more household members than non-clients (Barnes *et al.*, 2001). According to this study, children of clients were more likely to drop out of school than those of non-clients.

Yet, findings of a number of other studies have revealed that there was no difference between clients and non-clients in terms of investment on children's education. For example, a study conducted in Madagascar showed no significant difference in primary school enrolment between children of clients and non-clients of microcredit schemes (Gubert and Roubaud, 2005). Another study conducted in Zanzibar showed that there was no relationship between participation in Credit and Savings Scheme and household expenditure on education (Brannen, 2010). Furthermore, a study conducted in Ghana showed mixed results indicating that participation in microcredit schemes could have both negative and positive effects on education expenditure depending on the location (Nanor, 2008). In this study, clients spent more on education in Manya Krobo district while non-clients' expenditure on education was more in the Yilo Krobo district. This situation was explained by the fact that although there were more MFIs in Yilo Krobo district, the level of poverty among its indigenous people was higher than that in the other regions. Participation in credit schemes, therefore, was unlikely to contribute to better performance of borrowers' businesses due to low purchasing power of the indigenous people, a fact that could limit the former from investing in children's education.

Expenditure on health services is another aspect which has been found to be influenced by participation in microcredit schemes. There is a handful of evidence showing that microcredit increased investment in health care in terms of health insurance (Lacalle *et al.*, 2008) and expenditure on health care itself (Adjei *et al.*, 2009; Brannen 2010). However, Adjei *et al.* (2009) found that length of time within the programme did not affect health expenditure in Ghana. Other studies found that microcredit improved the health of the children of clients. Brannen (2010), for example, found that children of the clients were more likely to sleep under mosquito nets than those of non-clients in Zanzibar. Moreover, a study conducted in Ethiopia revealed that the nutritional status of clients' children was better than that of children of non-clients (Doocy *et al.*, 2005). Specifically, it is worth noting that Doocy *et al.* (2005) found that it was largely the female clients (and not male clients) who invested in their children's nutrition in Ethiopia.

Further, evidence suggests that women borrowers from different schemes used substantial part of the borrowed money to facilitate consumption smoothening. This position is supported by Johnston and Morduch (2008) and also by Beck *et al.* (2007) noting that the substantial part of microcredit is used to meet the consumption needs of borrowers. Makina and Malobola (2004) too support the idea when they observe that the poor are highly likely to use the loan for consumption rather than investment.

2.7 Demographic and Business Related Factors that Influence Performance of

Women Owned Microenterprises

It is imperative to emphasise here the fact that the performance of women owned MEs is a function of a number of factors, both personal and institutional. Literature shows that

demographic factors like age, marital status, level of education, age of business as well as location of business influence the performance of microenterprises.

Sleuwagen and Goedhuys (2002) found that age of a firm was a determinant for business growth in Côte d'Ivoire. However, there are mixed results as to whether age of business owner has positive or negative effect on business performance. Zahra (2013) found that age of business operator influenced not only the motive for women to engage in small businesses but also with income resulting from those entrepreneurial activities in Pakistan. According to this study, younger women's businesses performed better than those of the older ones (Zahra, 2013). Similar findings were also reported showing that younger entrepreneurs were relatively more successful than older ones (Rasheed, 2002; Stevenson and Jarillo, 1990). On the contrary, other evidence also established that the older the entrepreneur the greater his/her life experience, maturity, ability to accumulate financial credibility and manage a business (Bertaut and Starr-McCluer 2000; Kennickell *et al.*, 1997).

Literature revealed mixed results about owner's marital status and business performance. On the one hand, there is evidence that married women were faced with conflicting tension between family and business as a profession (Olson *et al.*, 2003). The authors observe that although being married had no statistically significant effect on the business performance, women owners of businesses perceived marriage as a constraint against business success. On the other hand, there is evidence showing that business owned by married women performed better than those whose owners are not married (Aderemi *et al.*, 2008; Adebite *et al.* 2007; Fielden *et al.*, 2000). The authors explained this phenomenon noting that married couples extend to each other social, financial and

psychological support and in that way support each other in handling business and family responsibilities as opposed to unmarried or widowed entrepreneurs.

Human capital is an essential aspect to consider while explaining various factors that may make microenterprises grow. Entrepreneurial know-how was found to be an important factor in determining operators' capability to access external financial resources (NEPAD, 2003). Specifically, level of participation in the formal trainings was found to have positive influence on microenterprises' performance (Kessy and Temu 2010; Kangasharju and Pekkala, 2002; Pena, 2002). However, women owners of microenterprises lacked the entrepreneurial know-how, reason that in turn led to limited access to funds to enable them start and/or expand their businesses (Brush, 1992; Rosa and Hamilton, 1996; Liedholm and Mead, 1999; NEPAD, 2003). Due to limited education, women business operators concentrate more on service and retail sectors which are less profitable (Brush, 1992).

Business location has positive influence on the performance of microenterprises. A study conducted in South-Western Nigeria to assess the choice and performance of women entrepreneurs in technological and non-technological enterprises revealed that the status of business premise had a significant effect on business performance (Aderemi *et al.*, 2008). The study found that businesses operating in surroundings with more cash-based economy performed better than those operating from locations with less cash-based economy.

Furthermore, type of business is also an important aspect that can determine the performance of women owned microenterprises. A study by Abor and Biekpe (2006) in Ghana revealed that women were mostly involved in very small firms called technically

‘sole proprietorship businesses’. It is also shown that women were less likely to start up and operate manufacturing or technological businesses than males (Mazzarol *et al.*, 1999). In Tanzania, women microenterprises were concentrated in specific types of businesses which are labour intensive as opposed to capital intensive. According to Rutashobya (1995), most women engage in retail, food processing, textile, clothing and service businesses. Similarly, three studies conducted by International Labour Organization in Tanzania (ILO, 2003), Ethiopia (ILO, 2003a) and Zambia (ILO, 2003b) revealed that women were mostly involved in service and retail businesses including food vending, beauty salons, decorations, informal catering, pottery and basket making. The studies also found that only few women were engaged in less capital intensive manufacturing businesses like tailoring, batik making, local brewing or informal food processing.

A study conducted in Ghana revealed that strong family support system, social network and professional development were among the factors that influenced the survival of women-owned small business start-ups in the city of Tema (Chea, 2008). Aldrich (1989) posits that social networks may have far-reaching consequences on business performance among women operators. According to this author, new entrants into business activities were excluded in the social networks and thus suffered from lack of relevant or important business information. The importance of business networks is also highlighted by Burke and Lee-Gossling (1991) noting that such networks were important in identifying business opportunities in Canada.

Experience with a specific business determined the level of performance of microenterprises. Evidence from the United States of America and the Netherlands suggest that continued experience with a business in the specific industry had positive

effect on the performance of the firm (Loscocco *et al.*, 1991 and Bosma *et al.*, 2004). Related experience was likely to result into increased number of contacts with suppliers, contractors, and customers (Cooper and Gimeno-Gascon 1992; Rauch and Frese 2000). Specifically, Brush and Chaganti (1998) found industry specific experiences had a significant effect on firm's revenues and employment levels in retail and service businesses. Accordingly, Jovanovic (1982) posits that continued experience results involved a learning process whereby entrepreneurs with more experience with their businesses were more likely to have their businesses growing compared to the new entrants.

Ultimately, motive to engage in business activities among proprietors can influence business performance. Empirical evidence suggests that most of microenterprises owners in Tanzania, and in the developing world at large, get into business out of necessity (Oyhus, 1999; Olomi, 2010; Nchimbi, 2002; Rose *et al.*, 2006). Investigating women's motive to engage in microenterprises, Nchimbi (2002) noted that women started business as a life strategy as opposed to career choosing. Since the motive for engagement in business was securing livelihood, it is argued that women's microenterprises were likely not to grow and graduate into SME since growth is not the primary goal of their establishment (Olomi, 2010; Rose *et al.*, 2006).

2.8 Gaps in the Literature

Generally, the surveyed literature showed that microcredit was one of the areas with rich literature. The reviewed literature revealed that the role of microcredit to the business performance and general household welfare of borrowers was fiercely contested. On the one hand, there were scholars who theoretically and empirically have demonstrated that microcredit has a negative effect on borrowers' welfare and thus the same can actually

make the borrowers' even poorer (Dichter and Harper, 2007; Bateman and Chang, 2009; Lont and Hospes, 2004, Mahjan, 1998, Adams and Von Pischke, 1992; Mosley and Hulme, 1998). On the other hand, however, there was enough evidence suggesting that microcredit is a panacea for poverty alleviation thus suggesting that the same could contribute positively to the performance of borrowers' businesses (Yunus, 1999; Sanyang and Huang, 2008; Woller and Parsons, 2002; Wurdnmann, 1998, Selejio, 200; Mduma and Wobst, 2005, Khandker, 2003).

The literature review revealed that while so much was written about microcredit, studies conducted in Tanzania to assess the relationship between microcredit and microenterprises' performance were limited and largely inconclusive. The previous studies (Kuzilwa, 2005; Kayunze *et al.*, 2005; Kessy, 2009), did not adequately address the contribution of microcredit to the performance of those enterprises mainly because their methodological approaches and the variables they treated. In terms of approach, Kuzilwa (2005) concentrated on the role of credit for small business success while focusing on only one case of the National Entrepreneurship Development Fund in Tanzania. With that approach, the author did not consider treatment of beneficiaries and non-beneficiaries of credit for comparison purposes. Furthermore, the study was confined to only one indicators of business performance namely farm output.

Kayunze *et al.* (2005) concentrated on whether credit improves the wellbeing of the poor or not. In terms of methodological approach, the authors did not use any specific business performance measures or treat non-recipients of credit for comparison purpose. Although the authors provided insights about link between microcredit and household welfare, they did not specifically show the influence of the same on business performance.

Kessy (2009) compared the performance of men and women owned enterprises, but with specific attention on clients of selected microfinance institutions. In terms of methodological approach, the author used two business performance measures including (a) number of employees and (b) size of capital investment. However, the author did not endeavour to compare the credit beneficiaries and non-beneficiaries. He instead made comparison of the performance of business of the clients who had participated in training and those who had not. The results of this study, therefore, cannot be used to perfectly tell whether participation in microcredit scheme has any influence on the performance of borrowers' businesses or not.

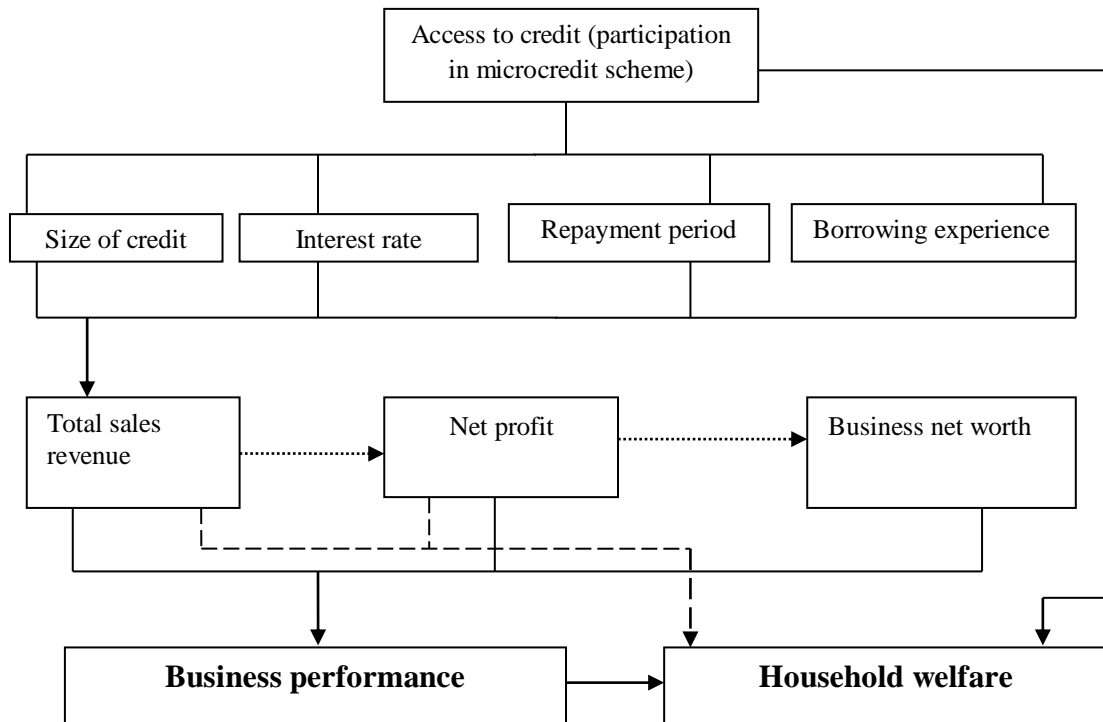
Furthermore, the surveyed literature indicated that none of the studies on microcredit attempted to create a model estimating the effects of credit characteristics on business performance. Little that was written on how credit characteristic like size of loan, interest rate, repayment period and borrowing experience affect business performance was found to be scattered. It was also observed that while a number of studies examined the effect of microcredit on household welfare (Nanor, 2008; Adjei *et al.*, 2009; Lacalle *et al.*, 2008; Barnes *et al.*, 2001a; Brannen, 2010; Pronky *et al.*, 2008; Shimamura and Lastarria-Cornhiel, 2009), none of them attempted to construct household asset indices for borrowers and non-borrowers for comparison purposes.

This study, different from the previous ones, was set to assess the performance of women owned microenterprises by treating both the recipients and non-recipients of microcredit services. The study adopted three measures of business performance which were: (a) total sales, (b) net profit and (c) business net worth. Further, the study sought to assess the effects of credit characteristics, particularly: (a) size of credit, (b) interest rate, (c) borrowing experience and (d) repayment period on the performance of borrowers'

businesses, an approach that was missing in the previous studies. Different from virtually all previous studies, this study constructed household asset index so as to show the difference between borrowers' and non-borrowers' households in terms of their welfare.

2.9 The Conceptual Framework

A critical review of the literature revealed that the performance of women owned microenterprises was a function of many factors. However, this study focused on how participation in microcredit schemes contributed to the borrowers' business performance and household welfare. The study had two dependent variables namely business performance and household welfare. Business performance involved three indicators namely total sales, net profit and business net worth. The household welfare was measured by household ownership of consumable and productive assets. The independent variables included, in the first place, status of access to credit (Yes/No). Other independent variables were size of credit (amount borrowed), interest rate, repayment period and the borrowing experience. The relationships between those variables are presented in Fig. 1 below.



Source: Author's own, 2011

Figure 1: Conceptual framework on the effects of credit on performance of women owned microenterprises

In the above conceptual framework, credit was considered to be the main source of capital to finance women owned MEs. In this context microcredit, which constitutes financial capital, was important in the starting up new businesses and in propagating the already existing businesses (Blanchflower *et al.*, 2001; Evans and Jovanovic, 1989; Holtz-Eakin *et al.*, 1994). The importance of credit in financing businesses is clearly articulated in the resource-based theory of entrepreneurship which contends that access to financial resources by founders is an important predictor of opportunity based entrepreneurship and new venture growth (Alvarez and Busenitz, 2001; Aldrich, 1999, Davidson and Honing, 2003; Shane 2000; Shane, 2003; Anderson and Miller, 2003; Shane and Venkataraman, 2000). This study assumed that without credit women owned microenterprises (MEs) were likely to get poor sales revenue due to insufficient capital. Limited capital among women operators of MEs means that their businesses would have limited goods and

services to trade on, a fact that would in turn lead to low profitability and eventually inability to invest in fixed assets for the respective businesses.

However, access to credit was viewed in terms of its size (amount received) rather than mere participation anyhow. In order for credit to enhance microenterprise's performance, it had to be enough to at least meet the borrower's financial needs. The underlying assumption here was that small-sized credit is not helpful both in setting up business and in fuelling its growth (Carreira and Silva 2010; Musso and Schiavo 2008; Parker and Van Praag, 2006). This view is supported by Coleman (2002) arguing that without sufficient capital, micro and small firms are unable to develop new products and services or grow to meet demand. In this study, therefore, size of credit was an important determinant of business performance through increased volume of goods bought and sold.

Yet, size of credit alone was not enough to guarantee better business performance in terms of total sales revenue, profitability and net worth. This study assumed that other three aspects namely interest rate, repayment period and loan experience; measured in terms of repeated participation; were also crucial. Low interest rate was expected to guarantee more returns on capital employed thus enabling the business owner purchase more tradable goods and services (Ferdinando, 2006; Stewart, 2010). Long repayment period would make it possible for MEs operators to have stable capital for running the business. This is particularly so given that short repayment period was found to increase the burden of loan since sometimes borrowers were to start making repayment instalments before they had made any profit (Field *et al.*, 2012). Experience with credit (long time participation in credit schemes) was likely to reinforce better utilization of the same in propagating business (Shane, 2003). In the context of this study, it was assumed that women owners of MEs with more borrowing experience (i.e. those with higher

frequency of borrowing) were more likely to use credit for effective business performance than their counterparts with limited experience; especially the new entrants in the lending schemes.

Taken together, therefore, ample size of credit, low interest rate, ample repayment duration and repeated loan experience (duration of participation in microcredit schemes) were essential to guarantee stable capital, which in turn would lead to business growth through increased volume of sales. The increased volume of sales was expected to lead to increased net profit, which would in turn lead to increased business net worth through acquisition of more current and fixed assets. Ultimately, the three aspects of increased sales revenue, net profit and business net worth would determine business performance.

Cognizant of the fact that microcredit beneficiaries do not utilize the entire borrowed amount of money in the business (Kuzilwa, 2005), this study assumed that part of the loan was directly used to finance other household demands including paying children's school fees, paying for children's health costs and buying household assets. The study also assumed that business owners used part of their output, whether sales revenue or profit to finance similar household needs. The relationship between sales revenue, credit and household welfare is shown in dotted line in the above illustration of the conceptual framework.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Research Design

This study adopted a cross-sectional research design. Particularly, the study employed what Kothari (2004) calls “after-only with comparison group”. This design was adopted because the limited time of a maximum of four years allocated for Doctoral Studies by Sokoine University of Agriculture was not favourable for a fully-fledged experimental study adopting longitudinal approach. Further, it would be both unethical (moral hazard) and impracticable to deny some women owners of microenterprises access to loans in order to use them as a proper control group. Using this design, the effect of microcredit on the performance of business was measured by comparing performance of businesses of women borrowers (treatment group) with those of non-borrowers (comparison group).

The study adopted a mixture of qualitative and quantitative approaches. This combined approach was desired because it would make it possible for the qualitative and quantitative data to complement each other and thus increase the overall validity of the study. Particularly, qualitative approach was taken into account because it is a powerful assessment tool that allows for in-depth probing so as to yield detailed information (Saunders *et al.*, 2009).

3.2 Location of the Study Areas

The study covered three major cities in Tanzania, namely Dar es Salaam, Mwanza and Arusha. These cities were selected for two main reasons. First, the cities had more providers of microcredit services than other cities and towns in Tanzania. For example, according to 2005 Bank of Tanzania’s Microfinance Directory (BOT, 2005), the three

cities were leading in terms of number of microfinance institutions operating in them. The Directory shows that there were 227 MFIs in Mwanza, 188 in Dar es Salaam and 77 in Arusha (BOT, 2005). Although more current data could not be obtained, the above information was relevant to show that the number of microcredit services' providers in those cities was high compared to other cities and towns in Tanzania. Second, since those three cities had many MFIs, it was assumed that they too would have more women borrowers than other towns in Tanzania.

The selection of the three cities, therefore, was appropriate for this study in the first place because the researcher intended to compare the performance of women owned microenterprises with credit and those without credit. To this end, those three cities would provide enough respondents, both borrowers and non-borrowers. Secondly, the researcher needed to involve respondents who had participated in different microcredit schemes in order to find out how the characteristics of credits obtained from those various sources affected business performance. This could be achieved in those three cities because they had many microcredit services providers.

3.3 Unit of Analysis and Sampling Approach

The unit of analysis was a woman owner (as opposed to just an operator) of a microenterprise, both borrowers and non-borrowers from MFIs and other sources of microcredit services in three cities namely Arusha, Dar es Salaam and Mwanza. The non-borrowers were used as a comparison group. The study used the following sampling techniques.

3.3.1 Cluster sampling

This technique was used to select three clusters of women involved in the corresponding three types of businesses namely manufacturing, service and retail enterprises. Women in those clusters were operating businesses under similar conditions. They too were operating their businesses from similar locations and under similar physical and regulatory environments. The choice to select those three clusters was based on the fact that most of women owners of microenterprises in Tanzania were engaged in service, retail and small manufacturing businesses (Rutashobya, 1995; ILO, 2003c).

3.3.2 Purposive sampling technique

Purposive sampling technique was used to select a total of 16 wards including 4 in Arusha city, 4 in Mwanza and 8 in Dar es Salaam. The wards were selected on merits that they contained relatively more women involved in microenterprise activities than others. The selection of those wards was facilitated by the city business officers. The same technique was used to select participants in focus group discussions and the respondents for the key informant interviews. The participants in focus group discussion meetings constituted some of the respondents to the questionnaire and were selected on the merits of their different experiences with business and microcredit schemes. The selection process involved getting two groups of 8 people each whose participants were borrowers and other two similar groups whose participants were non-borrowers from each of the three cities involved in this study. Similarly, the technique was also used to obtain 4 microcredit managers, including 2 from banks and 2 others from MFIs.

3.3.3 Simple random sampling

This technique was used to select individual respondents from each of the three clusters described above. Those respondents included borrowers and non-borrowers. In each of

the three cities, borrowers and non-borrowers were selected from the same locations to ensure that both groups were similar in most business aspects including, but not limited to, any public business promotion interventions. This was done in order to create suitable conditions for the comparison of the two groups, namely borrowers and non-borrowers during data analysis.

Given that statistics on the total number of women operators in those cities were not available at the respective Regional Trade Offices (RTO), the sample size was determined by using the following formula by Cochran (1997):

$$n = \frac{z^2 p(1-p)}{\ell^2}$$

Where:

n = sample size

Z = the abscissa of the normal curve

P = probability of selecting respondents with attributes that are present in the study population

ℓ = the acceptable sampling error

Using the above formula where $Z = 2.0$, $p = 0.5$, and $\ell = 0.05$, the required sample was calculated as follows:

$$n = \frac{(2.0)^2(0.5)(1-0.5)}{(0.05)^2} = 400$$

According to the above estimations, the required sample was 400 respondents. The distribution of the required respondents took into account the fact that Dar es Salaam City had higher population than the rest of the other two cities of Arusha and Mwanza

(NBS and OCGS, 2013). Based on this fact, therefore, the study involved 200 respondents from Dar es Salaam, 100 from Arusha and other 100 from Mwanza.

3.4 Sources of Data, Instruments and Methods of Data Collection

The study used both primary and secondary sources of data. The primary data were collected through the use of a structured questionnaire, focus group discussion meetings with selected business owners and through interviews with some managers of microcredit schemes in banks and MFIs. The secondary data used in this study comprised details about various loan products offered by the selected microfinance institutions (MFIs), loan amounts in different cycles, interest rates per month and per annum and nature of interest rates. The documents were obtained from various MFIs branches that were contacted.

3.4.1 The questionnaire

A questionnaire with mainly close-ended questions was used to collect quantitative data. This instrument was structured to collect information on business owners' demographic characteristics including age, size of household, level of education and marital status. It was also used to collect information on type of business, age of business and location at which business operated. Other information collected by the use of questionnaire included business owners' status of participation in microcredit schemes, amount borrowed (size of credit), borrowing experience, interest rate, and repayment period. Also, the instrument was used to collect information about business total sales, net profit and business net worth, the three indicators of business performance adopted by this study. A detailed description on how data on business performance indicators and on household welfare were collected is given below.

3.4.1.1 Collection of data on total sales

In this study, sales were considered to be total revenue obtained from business per month. The information on the sales was collected by one question requiring an entrepreneur to state the total sales during specific periods of time including the previous day, the previous week or the previous month. These three reporting options were provided with due realization that some of the operators of microenterprises did not keep written business records and, therefore, would face recall problems if they had to give weekly or monthly reports. The weekly and monthly options were specifically meant for those who kept written records. All of the reported sales were converted to monthly sales by multiplying sales per day or per week by the total number of days for which the business operated in the reference month. Total sales were expressed in Tanzanian Shillings (TZS).

3.4.1.2 Collection of data on net profit

In this study, profit was defined as the sum of the sales revenue less total business and operating costs in the previous month plus value of outputs consumed by the entrepreneur and her household members plus values of outputs given away. This definition was adopted from Daniels (1999: 4) on her consultative work on “measuring profit and net worth of microenterprises: a field test of eight proxies”. The operating costs were calculated from a list of costs and the amount spent on each per day/week/month. Information on sales was collected using a single question “what were your sales in the last day/week/month?” This question was obtained from AIMS questionnaire (Daniel, 1999: 3). Net profit was calculated using the following formula.

$$\text{Net Profit} = \text{Sales} - [\text{business costs} + \text{other operating costs}] + \text{output consumed by entrepreneur and her household members} + \text{output given away.}$$

Business costs involved the amount of money spent to restock the business in the previous month. This amount was obtained by summing up the cost of each item used to restock the business. Other operating costs involved a number of items including expenditures on paid labour, electricity, mobile phone charges (only for business), transportation of inputs, renting charges for shop/room/storage space, license, repair/services for machine and water bills/payments. Net profit was expressed in Tanzanian Shillings (TZS).

3.4.1.3 Collection of data on business net worth

Business net worth was considered to be the sum of fixed and current assets. It was calculated using the following equation:

$$\text{Business net worth} = \text{Current assets} + \text{Fixed assets}$$

Current assets involved inventory of finished goods (for manufacturing businesses), raw materials, cash, deposit/checking accounts, account receivables and loans. The value of loan was given a negative sign (-) because this was something the proprietor had to pay off from her earnings. The fixed assets included the monetary values of utilities, machinery, equipment and tools. The net worth value was expressed in Tanzanian Shillings (TZS).

3.4.1.4 Collection of data on credit characteristics

Data on the four credit characteristics namely size, interest rate, repayment period and borrowing experience were collected as follows. Information on the size of credit was collected by use of a single question whereby respondents were asked to state the amount of their last loan in Tanzanian Shillings (TZS). This question was followed by two others requiring them to state the interest rate per annum (in percentage) associated with their

last loan and repayment period in weeks. Where respondents could not give proper information on the interest rate, the researcher either calculated it or sought the required information from the respective lending institution. Lastly, the information on borrowing experience was collected by compiling information from two questions which required respondents to state: (a) number of cycles for which she had participated in microcredit schemes, and (b) length of those individual cycles. This information was expressed in number of weeks.

3.4.1.5 Collection of data on household welfare

The study involved collection of both quantitative and qualitative data on household welfare. Quantitative data were collected by use of a questionnaire. Mainly, these data consisted information on ownership of living houses and of household assets. Data on households' ownership of living houses were collected using two questions. First, the respondents were to indicate whether they owned living houses or not. If a respondent indicated that her household owned a living house, she then had to state whether that house had been constructed through loans or not. Only responses indicating that construction of living houses had used borrowed money were taken.

In order to collect data on ownership of household assets, the researcher read a list of assets to all the 400 respondents (including borrowers and non-borrowers), and they were to respond "YES" if their household owned that specific asset or "NO" if their household did not own it. The choice of items to include in the asset index construction was influenced by items included in previous similar studies. Largely, the previous studies that had constructed asset (or wealth) indices used data from the Demographic and Health Surveys for particular countries of interest. In Latin America's Public Opinion Project (LAPOP), ten household items namely television, refrigerator, conventional telephones,

cellular telephone, vehicle, washing machine, microwave oven, indoor plumbing, indoor bathroom and computer were used to construct an asset index (Cordova, 2009: 9). In Tanzania Demographic and Health Survey 2010, nine items including radio, television, mobile telephone, non-mobile telephone, refrigerator, bicycle, motorcycle, car/truck, and ownership of land were used (NBS and ICF Macro, 2011: 26).

This study involved a total of 14 items to construct an asset index for households of women borrowers and non-borrowers. Those items were radio, television, DVD player, computer, bicycle, motorcycle, decoder, refrigerator, sewing machine, juice blender, gas cooker, hair drier (used in women salon), thermos flask/hot pots/food warmers, and kiosk/booth/room from which the business operated. The selection of these items was based on the items included in some previous studies (NBS and ICF Macro, 2011 Cordova, 2009, Filmer and Pritchett, 1998) and researcher's own consideration of the real living conditions of women owners of microenterprises in Tanzania.

It should be noted here that the number of variables included in the construction of household index matters in terms of its validity. According to McKenzie (2005), researchers should consider including more variables in order to be able to capture inequality among households. Using more (many) variables is likely to make it possible to avoid clumping and truncation, two effects that may deter the component scores (McKenzie, 2005). In the previous studies the number of variables used ranged from 10 (Schellenberg *et al.*, 2003) to 30 (McKenzie, 2005). Given this margin, the selected 14 items were considered to be enough to construct a reasonable asset index for the households of borrowers and non-borrowers women owners of microenterprises in the study areas.

3.4.2 Focus group discussions

Focus group discussions focused specifically on motives for women engagement in microenterprise activities, the determinants of business' performance, the contribution of loan on the performance of businesses and constraints against better business performance. Furthermore, the meetings sought to find out how microcredit contributed to household wellbeing in terms of its contribution to children's education and health and ownership of household assets. Table 1 provides details about the number of focus group discussion meetings held in each of the three cities selected.

Table 1: Focus group discussion meetings conducted in each city

Group of respondents	Arusha	Dar es Salaam	Mwanza	Total
Borrowers	2	2	2	6
Non-borrowers	2	2	2	6
Total	4	4	4	12

3.4.3 Key informant interviews

Key informant interviews were held with branch managers of selected MFIs and commercial banks. The interviews were set to find out detailed explanation on the procedures and conditions that prospective borrowers had to meet so as to qualify for loans, criteria for upgrading a borrower to another loan cycle, interest rates and the lending mechanisms. Accordingly, the tool sought to get managers' opinions about whether the loans had made any positive effect on the borrowers' businesses and welfare or not.

3.5 Data Analysis Techniques

3.5.1 Quantitative data analysis

The analysis of quantitative data involved various techniques. Descriptive statistical techniques were used to analyse information on demographic characteristics of respondents, business characteristics and the dynamics and nature of women owned microenterprises. The results of that analysis were presented in tables and charts using frequencies, percentages, minimum, mean and maximum values.

An independent sample t-test was used to determine whether there was significant difference in the performance of the businesses of borrowers and those of non-borrowers in terms of mean sales, net profit and business net worth. In this test, the three aforementioned business performance indicators namely total sales revenue, business net worth and net profit were used as test variables. The business operators' borrowing status (1 = Yes and 2 = No) was used as the grouping variable. The results of this analysis were presented in tables using group statistics and t-statistics. Moreover, Pearson's correlation analysis was used to assess the relationship between the four credit characteristics namely size of credit, interest rate, repayment period and borrowing experience on the one hand and business performance on the other.

The effects of all the four credit characteristics on the above mentioned three business performance indicators was estimated by using a multiple linear regression model. The rationale for using this type of model was based on the nature of the dependent variable and the independent variables all of which were measured at the ratio level. The aim was to find the contribution of each of the individual aforementioned four credit characteristics on business performance. Specifically, this type of model was preferred given that there were more than one predictor variables. Before carrying out the analysis,

the researcher performed the following three procedures. First, the researcher checked whether the three dependent variables (sales revenue, net profit and business net worth) and the four independent variables (size of loan, interest rate, repayment period and borrowing experience) that were used in the multiple linear regression equation were normally distributed. This was done by computing normal distribution curves and checking them visually to see whether they were normally distributed or not. All of those variables were found to be skewed a bit to the right. Second, all the seven variables mentioned above were transformed using logarithm to base 10 in order to improve their distribution towards normal distribution. It is the transformed valued that were used in the linear regression model. Therefore, the model adopted the following logarithmic form.

$$\text{Log}Y_n = B_0 + B_1 \log X_1 + B_2 \log X_2 + B_3 \log X_3 + B_4 \log X_4 + \varepsilon$$

B_0 was a constant; B_1 ... B_4 were beta coefficients and ε was an error term. For operational purposes Y_1 , Y_2 and Y_3 represented total business sales (*tsales*), net profit (*nprofit*) and business net worth (*networth*) respectively. Accordingly, X_1 , X_2 , X_3 and X_4 represented size of credit (*size*), interest rate (*interest*), repayment period (*repayment*) and borrowing experience (*experience*) respectively.

During the analysis, multicollinearity effect was checked by computing variance inflation factors (VIFs) and tolerance levels of all the independent variables. A VIF factor value of not more than 10 and a tolerance level of at least 0.1 indicated absence of strong relationships between the independent variables (Landau and Everitt, 2004). The interpretation of regression analysis was based on group statistics (means and standard deviation), Pearson correlations, beta coefficients, t-values, adjusted R square values, F statistics and significance (p-values).

The contribution of credit to household welfare was assessed by household ownership of living houses and of household assets. The analysis of quantitative data involved use of chi-square test to find out whether more borrowers' households owned living houses than those of non-borrowers. Principal Component Analysis (PCA) was used to construct a household asset index for borrowers and non-borrowers. The intention of this kind of analysis was to find out whether borrowers had more household assets than non-borrowers. During data entry, YES responses were coded 1 while NO responses were coded 0. This kind of coding was done so as to transform the responses in a dichotomous scale as suggested in the literature (Vyass and Kumaranayake, 2006). The results of the asset index derived from PCA for each household can be written using the following formula by Filmer and Pritchett (1998)

$$A_j = f_1 * \frac{a_{j1} - a_1}{s_1} + \dots + f_n * \frac{a_{jn} - a_n}{s_n}$$

$$A_j = \sum_{i=1}^n f_i(a_{ji} - a_i)/S_i$$

Where

A_j = an asset index for each household ($j = 1, \dots, n$)

f_i = the scoring factor for each durable asset of household ($i = 1, \dots, n$)

a_{ji} = the i^{th} asset of j^{th} household ($i, j = 1, \dots, n$)

a_i = the mean of i^{th} asset of household ($i = 1, \dots, n$)

s_i = the standard deviation of i^{th} asset of household ($i = 1, \dots, n$)

During the analysis, an extraction method using varimax rotation method was selected. The choice of varimax rotation (one of orthogonal rotations) was preferred under the assumption that factors involved in the analysis were not correlated (Tabachnick and Fidell, 2007). Accordingly, three important aspects namely determinant matrices

(R-matrices), Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity were checked for. These tests were conducted to validate whether data collected were suitable for Principal Component Analysis or not. The household consumable and productive assets' index was constructed using the scores of the first components for both borrowers and non-borrowers. The first component was used because it accounts for the largest variance (Field, 2005). The scores of the first component were also popularly used in various previous studies (Filmer and Pritchett, 1998; Mckenzie, 2003; Mckenzie, 2005; Schellenberg *et al.*, 2003; Vyass and Kumaranayake, 2006; Labonne *et al.*, 2007) in the construction of assets' indices.

3.5.2 Qualitative data analysis

Qualitative findings were subjected to content analysis. During the analysis the researcher carefully organized the information obtained through key informant interviews and focus group discussion in a manner which matched with the key research themes under each of the specific objectives. Qualitative information was used to complement the quantitative one, and often direct quotations from the interviewees and participants to FGD meetings were presented as evidences. Use of quotations was aimed at increasing the validity of the information presented.

CHAPTER FOUR

4.0 PRESENTATION AND DISCUSSION OF RESEARCH FINDINGS

4.1 Respondents' Socio-demographic and Business Characteristics

4.1.1 Socio-demographic characteristics

This study involved four demographic characteristics of women owners of microenterprises namely age, level of education, marital status and size of household. The respondents' demographic characteristics were as summarized below.

Table 2: Demographic characteristics of respondents

Demographic characteristics	Arusha (n = 100)	Dar es Salaam (n = 200)	Mwanza (n =100)	Total (n = 400)
Level of education	%	%	%	%
Never attended formal education	7	2	4	3.8
Primary education	71	83.5	73	77.8
Secondary education	21	13	22	17.2
Post secondary school education	1	1.5	1	1.3
Marital status				
Single	14	27.5	19	22
Married	66	68.5	75	69.5
Divorced	2	1	1	1.2
Separated	4	2.5	1	2.5
Cohabiting	2	0.5	1	1
Widow	12	0	3	3.8
Mean age of respondents (yrs)	36.2	32.7	34.3	34.0
Mean size of household	4.5	4.2	4.7	4.4

Age of respondents: The ages of the respondents ranged from 20 to 62 years. The average age of the respondents was 34.0 years. There were no big regional variations in terms of average ages of respondents. For instance, the average age of respondents in Arusha city was 36.2 years, while in Dar es Salaam and Mwanza the averages were 32.7 and 34.3

respectively. These findings seem to match with those of the 2010 Tanzania's national Micro, Small and Medium Enterprises (MSME) baseline survey (URT and FSDT, 2012) which showed that ages of many respondents ranged from 25 to 34 years (36%).

Level of education: Most of the respondents (77.8%) had attained primary education. This proportion is a little bit higher than one obtained from the 2010 national MSME survey which showed that 64.9% of all business owners had attended primacy education (URT and FSDT, 2012). This variation can be explained by the fact that, while that survey included medium enterprises, this study focused only on microenterprises. It should be noted here that microenterprises operate more informally compared to medium enterprises and therefore owners of the former are more likely to have lower levels of education than owners of the latter. Nevertheless, a surprising finding was that 15 (3.8%) of the respondents had never attended formal education, a fact that could signify that they were not able to read and write. This proportion was lower than one obtained from the 2010 national MSME survey where 23.6% of business owners had not attained any formal training (URT and FSDT, 2012).

Marital status: The findings revealed that, while 69.5% of the respondents were married; 22% were single women who had never been married; 3.8% were widows; 2.5% were married before but had separated; 1.2% had divorced their husbands and 1% was cohabiting with some men. Proportion wise, these findings match with ones obtained from the 2011/12 National Household Budget Survey (NBS, 2014) which revealed that 56.5% of respondents were married; 31.1% were single (never married); 6.6% were widows and 5.8% were divorcees. The reason for the differences noticed in the findings is that the National Household Budget Survey involved all types of business while this study focused only on women owned microenterprises.

Size of households: The sizes of respondents' households, in terms of number of persons who normally stayed in the household, varied widely. The minimum size was one person while the maximum size was 12 persons. Overall, the average size of household was 4.4. Although regional variations were relatively small, the average size of households in Dar es Salaam (4.2) was relatively smaller than in Arusha (4.5) and Mwanza (4.7). These findings do not differ very much from the ones obtained from the National Household Budget Survey 2011/2012 where average size of household in Tanzania Mainland was 5.0. According to this survey average household size in the urban areas was 4.7 while in Dar es Salaam it was 4.0 (NBS, 2014).

4.1.2 Business characteristics

This study involved three business characteristics namely location of business operations, type and age of businesses. The description of those businesses is presented below.

Table 3: Distribution of respondents by business characteristics (n = 400)

Location of operation	n (%)	Type of business	n (%)
Roadside	236 (59.0)	Service	211 (52.8)
Market	85 (21.2)	Retail	127 (31.8)
Home	48 (12.0)	Manufacturing	62 (15.5)
Mobile	18 (4.5)		
City centre (in shops)	9 (2.2)		
Industrial areas	4 (1.0)		
Average age of business	5.3 years		

Types of business: The study involved respondents from three types of businesses. Slightly more than half of the respondents (53.8%) were involved in service businesses like food selling or vending, selling of drinks in restaurants or in open places, beauty salons and selling of roasted maize, among others. Other 31.5% of the respondents were

involved in retail businesses like operating small shops (kiosk), selling vegetables, selling of mobile phone air time and vending small consumable items. Further, 15.5% of the respondents were involved in manufacturing businesses like tailoring, making juices and ice creams. It should be noted here that most of women owners of microenterprises in Tanzania were engaged in service, retail and small manufacturing businesses (Rutashobya, 1995; ILO, 2003).

Location of the business: About three-fifths of the respondents (59%) operated their businesses on roadsides. It was shown that other 21.2% of those businesses operated at market places, 12% at home, 2.2% in commercial city centres (in shops) and 1% in industrial areas. The findings also revealed that 4.5% of businesses were mobile meaning that they were street vendors. To some extent, these findings differ from the ones obtained from the 2010 National MSME survey which showed that 16.6% of businesses were operated from roadsides; 39.8% operated from own houses; 18.4% from commercial areas (i.e. premises with business licenses) and 8.4% were mobile (URT and FSDT, 2012). This variation can be explained by the fact that the national MSME survey involved SMEs, which were relatively larger than microenterprises (MEs) in terms of capital investment in the business. The former were also more likely to belong to the category of “formal businesses” by virtue of acquisition of business license and therefore were more likely to operate from town centres than the latter.

Age of business: The ages of the businesses ranged from 1 to 43 years. The average age of those businesses was 5.3 years. It is worth noting here that most of women owned microenterprises were informal businesses. Further analysis revealed that businesses in Arusha were relatively older (6.6 years) than in Dar es Salaam (4.3 years) and Mwanza (5.9 years). To some extent, the findings on the average age of microenterprises reflected

one obtained in the national MSME survey, where the average age of formal business was 7.0 years while for the informal business the average age was 5.6 years (URT and FSDT, 2012).

4.2 The Performance of Women Owned Microenterprises in Tanzania

In this study, three indicators including total sales, net profit and business net worth were used to measure business performance. All these three variables were measured in Tanzanian Shillings (TZS).

Table 4: Average performance of women owned microenterprises (n = 400)

Business					
characteristics	n	Minimum	Maximum	Mean	Std. Deviation
Total sales	400	120 000	6 346 000	1 244 839	895 836.1
Net profit	400	14 286	3 397 600	530 662	467 794.9
Business net worth	400	- 850 000	4 295 000	578 872	670 157.9

The findings in Table 4 show that average total sales per month were TZS 1 244 839 while average net profit was TZS 530 662 and business worth was TZS 578 872. It was found that the minimum value of business net worth was TZS - 850 000. The negative sign on the net business worth means that some women owners of microenterprises had borrowed more than the actual value of their businesses. It also means that some women borrowers did not use the borrowed money to finance the business but other household needs. In other words, the findings indicate that some women were in the state of indebtedness.

4.2.1 Selected owners' demographich characteristics and busienss performance

4.2.1.1 Business performance and level of education

The findings revealed that businesses of respondents with post secondary school education experienced the highest sales revenue (TZS 1 386 281), the highest net profit (TZS 602 203) and the highest value of business net worth (TZS 2 008 400). Respondents with no formal education experienced the lowest sales (TZS 871 569), the lowest net profit (TZS 400 771) and the lowest value of business net (TZS 265 847).

Table 5: Business performance by level of education (n = 400)

Level of education	Mean sales (TZS)	Mean net profit (TZS)	Mean business net worth (TZS)
Post secondary school education	1 386 281	602 203	2 008 400
Primary education	1 277 375	560 896	520 099
Secondary education	1 169 088	417 445	808 237
Never attended formal education	871 569	400 771	265 847

The results of one way ANOVA revealed that there was significant difference in business net worth among respondents with different levels of formal education ($F(3,396) = 13.290, p < 0.001$). There was no significant difference in total sales ($F(3,396) = 1.213, p = 0.305$) and in net profit ($F(3,396) = 2.225, p = 0.085$) among women entrepreneurs with different levels of education.

Post hoc multiple analysis results revealed that business net worth for businesses of the respondents with post secondary school education (Mean = TZS 2 008 400) was significantly higher than of the businesses owned by respondents with secondary education (Mean = TZS 808 237, $p < 0.001$), those with primary education (Mean = TZS

520 099, $p < 0.001$) and those who had never attended formal education (Mean = TZS 265 847, $p < 0.001$). Accordingly, the results showed that business net worth of businesses of the respondents with secondary education (Mean = TZS 808 237) was significantly higher than of businesses whose owners had primary education (Mean = TZS 520 099, $p < 0.01$) and of those who had never attended formal education (Mean = TZS 265 847, $p < 0.01$).

It appears from these findings that women who had attained higher level of education made long term investment in their businesses through purchasing of business assets, which constituted business net worth. This finding, therefore, is in line with findings of several previous studies which concluded that level of participation in formal training had positive effect on microenterprises' performance (Zahra, 2013; Kessy and Temu 2010; Kangasharju and Pekkala, 2002; Pena, 2002). In this respect, participation in formal training (education) enhanced entrepreneurial know-how in terms of effective utilization of resources including credit.

4.2.1.2 Business performance and marital statuses

The findings revealed that average sales were the highest for the businesses of separated women (TZS 1 814 574) and the lowest for the businesses of single women (TZS 913 371). Accordingly, average net profit was also the highest for the businesses of separated women (TZS 709 090) and the lowest for the businesses of the cohabiting women (TZS 248,725). However, average business net worth was the highest for the businesses of the cohabiting women (TZS 1 323 250) and the lowest for the businesses of the divorced women (TZS 327 900).

Table 6: Business performance by marital status (n = 400)

Marital status	Mean sales (TZS)	Mean net profit (TZS)	Mean business net worth (TZS)
Widow	966165	463343	471438
Cohabiting	1274350	248725	1323250
Separated	1814574	709090	499860
Divorce	945700	447000	327900
Married	1349262	568700	581799
Single	913371	419266	577342

One-way ANOVA results showed that there was significant difference in total sales among women with different marital statuses ($F(5, 394) = 4.573, p < 0.001$). There was no significant difference in net profit ($F(5, 394) = 2.069, p = 0.068$) or business net worth ($F(5, 394) = 1.237, p = 0.291$) among women with various marital statuses.

Post hoc multiple comparison analysis revealed that sales of businesses of separated women (Mean = TZS 1 814 574) were significantly higher than those of single women (Mean = TZS 913 371, $p < 0.05$) and of widowed women (Mean = TZS 913 371, $p < 0.05$). Accordingly, sales for married women (Mean = TZS 1 349 262) were significantly higher than those of single women (Mean = TZS 913 371, $p < 0.001$).

In the above findings, marital status was found to influence business performance. The findings revealed that average sales of businesses owned by married women were higher than those of single women. This specific finding is supported by various previous studies, which concluded that businesses whose owner is a married couple performed better than those owned by unmarried individuals (Aderemi *et al.*, 2008; Adebite *et al.*, 2007; Fielden *et al.*, 2000). The findings can be explained by the fact that, different from unmarried business owners, married couples could support each other psychologically

and socially. This is an appealing factor in the context of microenterprises, where those businesses are often treated as household businesses. Married women could, therefore, benefit from two social networks including their own and those of their husbands.

4.2.1.3 Relationship between size of household and business performance

Results of Pearson's correlation analysis revealed that there was significant positive correlation between size of family and total sales ($r = 0.121$, $p < 0.05$). There was no significant correlation between size of family and net profit or between size of family and business net worth ($p > 0.05$)

Table 7: Business performance by size of household of owner (n=400)

Variables	Size of household	Total sales	Net profit	Business net worth
Size of household	1.000			
Total sales	0.121*	1.000		
	(0.016)			
Net profit	0.045	0.734***	1.000	
	(0.372)	(0.000)		
Business net worth	-0.036	0.311***	0.254***	1.000
	(0.470)	(0.000)	(0.000)	

***. Correlation is significant at the 0.001 level (2-tailed).*. Correlation is significant at the 0.05 level (2-tailed).

As shown in Table 7, size of household was positively correlated with total sales at $p < 0.05$. It is also shown that although there was positive correlation between household size and net profit and between household size and business net worth, those relationships were not statistically significant ($p > 0.05$). The expectation of this study was that size of household would have negative effect on all the three measures of business performance, given that household members also consumed part of the business output or used part of

the money obtained from the business to pay school fees or cater for medical expenses. This view is also held by Olson *et al.* (2003: 659) noting that “children are expensive, and if the business must be able to support the family adequately for the owner to perceive it as successful, each additional child may raise the threshold of what is perceived as success”. Surprisingly, however, the study revealed something different. However, this particular finding can, probably, be explained by the fact that in many cases family (household) members served as unpaid employees to the women owned enterprises. This supply of unpaid labour might have had positive effect on business performance.

4.2.1.4 Relationship between age of business owner and business performance

Results of Pearson’s correlation analysis showed that age of business owner was positively correlated with total sales at a significant level ($r = 0.121$, $p < 0.05$). Accordingly, age of business owned was negatively correlated with business net worth at significant level ($r = -0.111$, $p < 0.05$). However, age of business owner and net profit were not significantly correlated.

Table 8: Business performance by age of the owner (n = 400)

Variables	Age of business owner	Total sales	Net profit	Business net worth
Age of business owner	1.000			
Total sales	0.121* (0.015)	1.000		
Net profit	0.086 (0.087)	0.734*** (0.000)	1.000	
Business net worth	-0.111* (0.026)	0.311*** (0.000)	0.254*** (0.000)	1.000

*. Correlation is significant at the 0.05 level (2-tailed). *** Correlation is significant at the 0.001 level (2-tailed).

The findings in Table 8 imply that the businesses of older respondents were performing better than those of younger ones in terms of sales revenue. This particular finding corroborates previous studies which found that the businesses of older entrepreneurs were likely to perform better than those of new entrants because of their greater life experience, maturity and ability to accumulate financial credibility and manage a business (Bertaut and Starr-McCluer 2000; Kennickell *et al.*, 1997).

It is also shown that businesses of older respondents were likely to have less value of business net worth (assets) than those of younger ones. On this aspect, the findings support those of previous studies which found that younger entrepreneurs were relatively more successful than older ones (Rasheed, 2002; Stevenson and Jarillo, 1990). Probably, the most appealing explanation of this particular finding is that older business operators owned business assets with lesser value than younger ones. This can be justified by the fact that older business owners also owned older assets than the younger ones.

4.2.2 Selected business characteristics and business performance

4.2.2.1 Business performance by type

The findings revealed that business performance varied among the three types of businesses involved in this study. Average sales were the highest for retail businesses (TZS 1 325 764) and the lowest for manufacturing businesses (TZS 1 044 431). Net profit was the highest for manufacturing businesses (TZS 574 196) and the lowest for the retail businesses (TZS 509 525). Business net worth was the highest for manufacturing businesses (TZS 883 966) and the lowest for service businesses (TZS 440 157).

Table 9: Business performance by type (n = 400)

Type of enterprise	Mean sales (TZS)	Mean net profit (TZS)	Mean Business net worth (TZS)
Service	1255019	530593	440157
Retail	1325764	509525	660393
Manufacturing	1044431	574196	883966

One-way ANOVA results revealed that business net worth varied significantly among all three types of businesses ($F(2,397) = 12.574, p < 0.05$). Post hoc multiple comparison analysis results indicated that business net worth for manufacturing businesses (Mean = TZS883 966) was significantly higher than for service businesses (Mean = TZS 440157, $p < 0.001$) and for retail businesses (Mean = TZS 660 393, $p < 0.05$).

It is of interest to note that type of business in terms of service, retail or manufacturing firm was found to influence its performance. The level of investment on business assets, which in this study constitutes business net worth, differed significantly across the three types of businesses. Specifically, average business net worth was significantly higher for manufacturing than for retail and service businesses. These findings can be explained by the fact that service and retail businesses required less capital than manufacturing businesses. This explains the reason why women, who according to various authors are capital constrained, tend to concentrate on service and retail activities (Mazzarol *et al.*, 1999; Brush, 1992). For instance, it is known that women are less likely to start up and operate manufacturing than males (Mazzarol *et al.*, 1999). It has also been noted that, due to limited education, women business operators concentrate more on service and retail sectors which are less profitable (Brush, 1992).

4.2.2.2 Business performance by location of operation

The findings revealed that performance of women owned microenterprises operating in Arusha, Dar es Salaam and Mwanza differed accordingly. Table 10 below presents the details.

Table 10: Business performance by city of operation (n = 400)

Name of city	Mean Sales (TZS)	Mean net profit (TZS)	Mean business net worth(TZS)
Arusha	1535742	624816	677307
Dar es Salaam	1049923	484384	494086
Mwanza	1343770	529066	650011

One-way ANOVA results showed that the performance of women owned microenterprises differed significantly among the three regions in terms of total sales ($F(2,397) = 11.157, p < 0.001$), net profit ($F(2, 397) = 3.035, p < 0.05$) and net business worth ($F(2, 397) = 3.280, p < 0.05$). Post hoc multiple comparison results revealed that sales for businesses operating in Arusha city (Mean = TZS 1 535 742) were higher than those in Dar es Salaam city (Mean = TZS 1 049 923, $p < 0.001$). Net profit was significantly higher for businesses operating in Arusha (M = TZS 624 816) than those in Dar es Salaam (Mean = TZS 484 384, $p < 0.05$). Accordingly, business net worth for businesses operating in Arusha city (Mean = TZS 677 307) was significantly higher than of the businesses in Dar es Salaam city (M = TZS 494 086, $p < 0.05$). There were no significant differences between businesses operating in Arusha city and those in Mwanza city in all three performance indicators namely sales, net profit and business net worth.

Further, the findings showed that sales were the highest for businesses operating in city centres (in shops) (Mean = TZS 2 448 278) and the lowest for businesses operating at the

road sides (Mean = TZS 1 157 542). Accordingly, net profit was the highest for businesses operating in city centres (in shops) (Mean = TZS 1 160 285) and the lowest for mobile businesses (Mean = TZS 466 102). Business net worth was the highest for businesses operating around industrial areas (Mean = TZS 1 215 000) and the lowest for businesses operating in markets (528 407).

Table 11: Business performance by specific location of operation (n = 400)

Location of business	Mean Sales (TZS)	Mean net profit (TZS)	Mean business net worth (TZS)
Home	1172543	508304	565331
Market	1360508	560334	528407
Roadside	1157542	498047	582744
City centre (in shops)	2448278	1160285	714222
Industrial area	2308425	966632	1215000
Mobile	1197912	466102	593500

The results of one-way ANOVA revealed that mean sales of women owned microenterprises operating from various specific locations differed significantly ($F(5,394) = 5.470, p < 0.001$). Likewise, net profit of businesses operating from various locations differed significantly ($F(5,394) = 4.536, p < 0.001$). Business net worth for businesses operating in various locations was not significantly different.

Post hoc multiple comparison analysis revealed that sales of businesses operating in the city centres (in shops) (Mean = TZS 2 448 278) were significantly higher than those of businesses operating at home (Mean = TZS 1 172 543, $p < 0.001$), in markets (Mean = TZS1 360 508, $p < 0.001$), at the road sides (Mean = TZS 1,157,542, $p < 0.001$) and of the mobile businesses (Mean= TZS 1 197 912, $p < 0.001$). Similarly, post hoc analysis

revealed that sales for businesses operating in the industrial areas were significantly higher than for business operating at home (Mean = TZS 2 308 425, $p < 0.05$), market (1 360 508, $p < 0.05$), and of the mobile businesses (M = 1 197 912, $p < 0.05$). However, there was no difference between mean sales of businesses operating in city centres (in shops) and those operating around the industrial areas.

The findings further revealed that net profit of businesses operating in city centres (in shops) (Mean = TZS 1 160 285) was significantly higher than that of those businesses operating at home (Mean = TZS508 304, $p < 0.001$), in markets (Mean = TZS 560 334, $p < 0.001$), on the road sides (Mean = TZS 498 047, $p < 0.001$) and of the mobile businesses (Mean = TZS 466 102, $p < 0.001$). Net profit of businesses operating around industrial areas (Mean = TZS966 632) was significantly higher than that of those of businesses operating on the road sides (M =, 466 102, $p < 0.05$) and of the mobile businesses (M = 466 102, $p < 0.05$). Net profit of businesses operating in city centres (in shops) and of businesses operating around industrial areas was not significantly different ($p > 0.05$).

The above findings indicate that locations from which businesses operated affected levels of business performance. Specifically, the findings revealed that sales of businesses operating in city centres (in shops) and of those businesses operating around industrial areas were significantly higher than those of businesses operating at home, in local markets, on the road sides and of the mobile businesses. This particular phenomenon can be explained by the fact that city centres and industrial areas were highly populated, and for that reason businesses operating there were likely to have more consumers than those in the city peripheries and those operating along the roads or at owners' homes. This view is supported by findings of a previous study in Nigeria which found that businesses

operating in surroundings with more cash-based economy performed better than those operating in locations with less cash-based economy (Aderemi *et al.*, 2008). It can, therefore, be argued that businesses operating in areas with insufficient cash-based market activity are likely to suffer from poor performance in various aspects.

4.2.2.3 Relationship between age of business and its performance

Results of correlation analysis revealed that age of business was positively correlated with total sales ($r = 0.232$, $p < 0.01$) and with net profit ($r = 0.172$, $p < 0.01$). There was negative but insignificant correlation between age of business and business net worth ($r = -0.021$, $p = 0.681$).

Table 12: Relationship between age of business and performance (n = 400)

Variable	Age of business	Total sales	Net profit	Business net worth
Age of business	1.000			
Total sales	0.232*** (0.000)	1.000		
Net profit	0.172*** (0.001)	0.734*** (0.000)	1.000	
Business net worth	-0.021 (0.681)	0.311*** (0.000)	0.254*** (0.000)	1.000

***. Correlation is significant at the 0.001 level (2-tailed).

The interpretation of the above findings is that the older the age of the businesses the more were the sales turnover and net profit. Similar findings also emerged from a study by Brush and Chaganti (1998) which found that industry specific experiences had a significant impact on firm's revenues and employment levels in retail and service businesses. This can be explained by the fact that continued experiences, associated with

older businesses, was likely to result into increased number of contacts with suppliers and customers (Cooper and Gimeno-Gascon 1992; Rauch and Frese 2000).

4.3 Role of Microcredit on the Performance of Women’s Microenterprises

4.3.1 Sources of credit

Out of the 400 respondents who were involved in this study, 217 (54.3%) had received credit while 183 (45.8%) had did not. Those who had received credit obtained it from six sources, both formal and informal. Fig.2 provides the details.

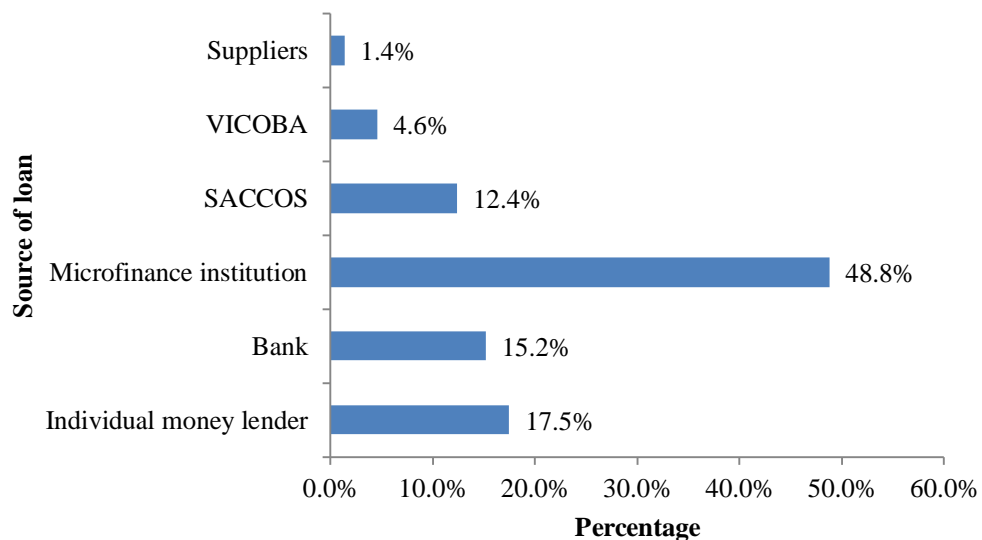


Figure 2: Percentage distribution of borrowers by source of credit (n = 217)

The findings in Fig. 2 indicate that, although commercial banks had introduced microfinance products, the number of women who had acquired credit from them was still relatively low (15%) compared to MFIs (48.8%) and individual money lenders (17.5%). Qualitative findings also indicated that women owners of microenterprises could not access credit from banks because they lacked the ‘conventional’ collaterals. In a focus group discussion, one of them was quoted saying:

“I decided to come and borrow from PRIDE because they do not ask about land lease document. If one gets people she knows well to form a group with, she can get loan quite easily. In other institutions like banks, one must have a house” (Borrower from PRIDE, Arusha City)

There was also evidence that women owners of microenterprises felt excluded by banks because of their socio-economic status. According to them, the loan officer in banks would disqualify women owners of microenterprises just from their outfit. One of the participants in a focus group discussion was quoted saying:

“It is very difficult for normal women to get loans from banks. When you go to banks, loan officers look at the way you are dressed; the shoes and clothes you have on and judge that you do not qualify. For instance, those who got the Billions of the Presidential Fund (Billions of President Kikwete) were those women with big businesses in the city. Weak women like me have to go to FINCA or PRIDE, and the end result is being humiliated when they (MFIs loans officers) come to sell everything we have” (Non-borrower, Mwanza City)

From these findings, it is clear that still women entrepreneurs had limited access to credit from commercial banks, which offered relatively low interest rate compared to MFIs or individual money lenders. The findings, therefore, corroborate those of some previous studies that microenterprises owners, especially women, cannot easily borrow from commercial banks due to lack of collateral items which are demanded in the process of asking for financial support (Aikaeli, 2012; Nchimbi, 2002). They are also in line with those of previous researchers who have established that the only viable sources of

business financing among micro-entrepreneurs in Africa are credits from microfinance institutions (Ibru, 2009; Kuzilwa, 2005).

To some extent the above findings support those obtained from the 2010 national MSME survey whereby 10.3% of business owners obtained credit from banks, 29.2% from MFIs, 14.3% from SACCOS, 36.3% from friends (who constituted money lenders), and 1.6% from suppliers (URT and FSDT, 2012). The findings also show that there is a growing interest among women owners of microenterprises to borrow from money lenders. It should be noted here that increased reliance on money lenders is an indication that either MFI are overburdened in terms of financial capacity or just that borrowers do not have the required qualifications including requirements to belong to a recognized group. Another important observation from the above findings is that some women were borrowing from their suppliers of tradable goods. This kind of borrowing involved obtaining tradable goods from suppliers with agreement to pay back later with interest.

4.3.1.1 Credit from commercial banks

The findings further revealed that among 33 respondents who had borrowed from banks 27 (81.8%) had obtained credit from AKIBA Commercial Bank while 6 (18.2%) had obtained credit from NMB.

Loans from NMB bank: NMB bank, which is a public-for-profit facility, offers one microfinance product called Micro and Small Enterprises (MSE) Loan. MSE loan was targeted to men and women with active businesses. Repayment deposits were made monthly. The loan applicants were compelled to deposit an establishment fee of 1.5% of the expected amount before securing loans. The details about loan size, repayment duration and interest rate are provided below.

Table 13: Microcredit product offered by NMB bank

Product Name	Loan Min (TZS)	Loan Max (TZS)	Loan Length (Months)	Interest Rate/year (%)
MSE Loan	100 000	7 500 000	12	24

Source: NMB Arusha Branch, 2012

Loans from Akiba Commercial Bank (ACB): Akiba Commercial Bank has one microfinance product known as “Solidarity Group Loan”. This loan product was designed for entrepreneurs in groups of 5 to 6 individuals with collateral security acceptable by the bank. The group members were individuals working in the same neighbourhood who knew one another well and also who were willing to guarantee one another. The loans were meant to be used for productive purposes including the purchase of raw materials, stock and fixed assets for the business. The loan could also be used for the expansion of the businesses. Strictly, the loans were not meant to finance business start-ups, cross border trades or any illegal dealing. Repayment was done weekly.

Table 14: Microcredit products offered by Akiba Commercial Bank

Product name	Loan Min (TZS)	Loan Max (TZS)	Loan Length (months)	Interest rate/year
Solidarity group loan	200 000	3 000 000	3 to 6	25 %

Source: ACB Head Quarters, 2012

4.3.1.2 Credit from microfinance institutions (MFIs)

The findings revealed that among 106 who borrowed from MFIs, 29 (27.6%) obtained credit from SEDA, 25 (23.6%) from BRAC, 22 (20.8%) from PRIDE, 14 (13.2%) from FINCA, 8 (7.5%) from TUJIJENGE, 5 (4.7%) from MWANANCHI Financial Services and 3 (2.8%) from ECLOF.

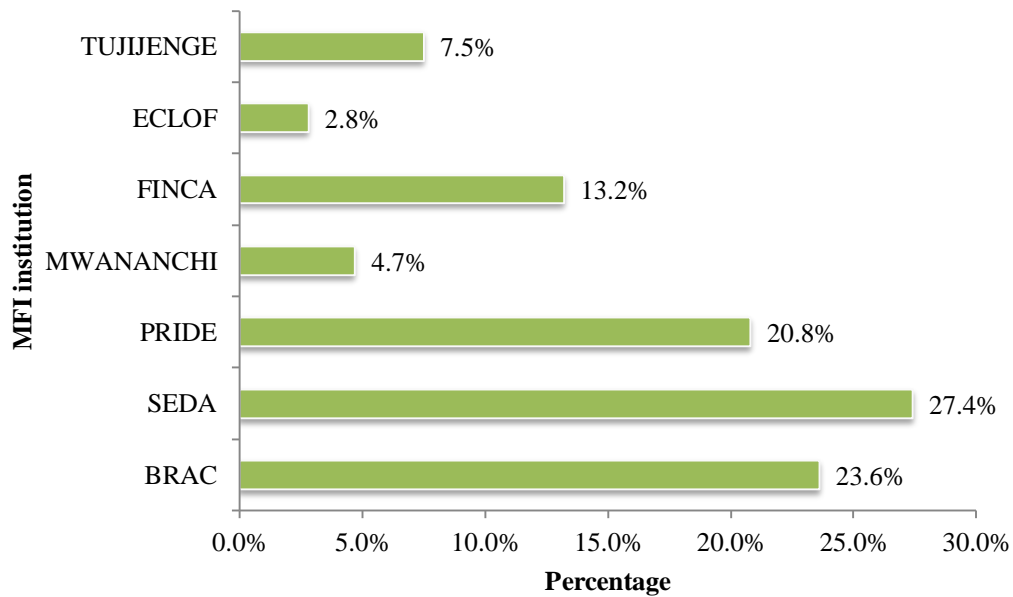


Figure 3: MFIs from which borrowers obtained credit (n = 106)

Loans from PRIDE Tanzania: Promotion of Rural Initiatives and Development Enterprises (PRIDE) Tanzania is a donor funded microfinance institution which has been operating in Tanzania since 1994 when it was registered as a company limited by guarantee. The main sources of finance to PRIDE Tanzania are NORAD, SIDA and savings from the clients. Generally, PRIDE targets poor but economically active individuals owning and running businesses. PRIDE loans were offered to solidarity groups of five individuals called “Enterprise Groups”. Operationally, 10 such group combined into one large group of 50 individuals called Market Enterprise Committee (MEC) for purposes of easy administration and enhancement of group mechanism. MEC must meet once a week. As a condition for securing credit, prospective clients made a saving of up to 25% of the expected amount. This saving served as an insurance balance. Apart from this saving, borrowers were compelled to make weekly saving of TZS 2000,

an amount which was refundable upon exit, in case of no damages or defaults made by group or MEC members.

Table 15: Loan size, interest rates and repayment schedule for MEC loan

Amount	Repayment period (Weeks)	Interest rate/year (%)	Deposit/week (TZS)	Interest/Week (TZS)	Repayment amount/week (TZS)
200000	25	30	2 000	1 200	11 200
500000	50	28	2 000	2 800	14 800
800000	50	28	2 000	4 480	22 480
1200000	50	28	2 000	6 720	31 720
2000 000	50	28	2 000	11 200	53 200

Source: PRIDE - Arusha Branch, 2012

Loans from Small Enterprises Development Agency (SEDA): SEDA is a not-for-profit financial institution which was established by World Vision Tanzania (WVT) as a pilot project way back in 1995. It became a separate institution in 1996. SEDA targets the economically active urban poor. SEDA has three microfinance products to small entrepreneurs including (a) group loans, (b) Solidarity loans and (c) Group Agricultural (balloon) loans. SEDA's loans were targeted to solidarity groups of 9 to 15 individuals who knew one another well and preferably resided or operated businesses at the neighbourhood. Mostly, the respondents in this study were beneficiaries of group loans whose size ranged from TZS 50 000 to 5 000 000 with a flat interest rate of 36% per year. Group agricultural loans were meant to support agricultural related business activities which were not among this study's three types of businesses namely service, retail and manufacturing. Below is a table showing loan categories as well as allocated amount and interest rates.

Table 16: Microfinance products offered by SEDA

Product	Amount range (TZS)	Interest rate/month (%)	Interest rate/year (%)
Group Loan	50 000 – 5 000 000	3	36
Solidarity loans	500 000 – 1 000 000	2.5	30
Group Agricultural loans	50 000 – 400 000	5	60

Source: SEDA Head Office – Arusha, March 2012

Loans from FINCA Tanzania: Foundation for International Community Assistance (FINCA) Tanzania has two microfinance products namely (a) Village Banking Loan and (b) Small Group Loan. Village Banking Loan was given to men and women who owned running businesses. Small group loans were targeted to men and women with running businesses. The lending methodology was through solidarity groups. Before the disbursement of loan, the prospective borrowers were compelled to make a saving of 10% of the expected amount. In each repayment cycle, clients made an additional saving of TZS 2000. According to MFTransparency (2012), women constituted between 61 and 80% of FINCA Tanzania's clients.

Table 17: Microfinance products offered by FINCA Tanzania

Product	Minimum loan (TZS)	Maximum loan (TZS)	Loan length (Months)	Interest rate/year (%)
Village Banking Loan	30 000	3 000 000	5 – 8	48%
Small Group Loan	350 000	4 000 000	6 – 12	42%

Source: FINCA – Arusha Office, 2012

Loans from BRAC Tanzania: Bangladesh based Rural Advance Committee (BRAC) had one microfinance product called “microfinance loan”. This loan product was designed for women aged between 20 to 50 years with running business. BRAC had two lending methodologies namely: (a) village banking and (b) group lending of which each comprised between 15 and 30 individuals. Repayment frequency was weekly. According to MFTransparency (2012), women comprised between 81 and 100% of the beneficiaries of loans from BRAC Tanzania.

Table 18: Microcredit loan product for BRAC - Tanzania

Product name	Minimum loan (TZS)	Maximum loan (TZS)	Loan Length (months)	Interest rate/year (%)
Microfinance loan	10 000	1 000 000	10	22.0

Source: BRAC – Olorian Branch (Arusha); 2012

Loans from TUJIJENGE: TUJIJENGE is a private for profit microfinance institution based in Dar es Salaam established in 2006. TUJIJENGE has two microfinance products namely (a) Group Flexible Loan and (b) Group Loan. Group loan was meant to support business, housing, education and emergency. The loan is offered through solidarity group arrangement where group members guarantee each other. The loan is given to a group and for that matter issuance of a subsequent loan depended on successful completion of prior loan by each of the group members. Other loan costs were an application fee of TZS 4 000 and savings of up to 20% of the expected loan amount. Women constituted between 81 and 100% of all beneficiaries of group loans from TUJIJENGE (MFTransparency, 2012).

Group flexible loan was a business product loan offered to groups of 15 to 35 members. What made this arrangement flexible was that the members in this group did not have to

wait for other group members so as to access subsequent loans. Loans were targeted to both men and women with running businesses. Loan sizes ranged from TZS 50 000 to TZS 3 000 000. Repayment time was either weekly. The costs of credit involved loan application fee of TZS 2 000 and loan processing fee of 2% of the expected amount. Women constituted between 61 to 80% who mostly resided in urban areas (MFTransparency, 2012).

Table 19: Microfinance loan products for TUJIJENGE

Product name	Minimum loan (TZS)	Maximum loan (TZS)	Loan Length (months)	Repayment	Interest rate/annum (%)
Group Flexible Loan	50 000	3 000 000	6	Weekly	36.0
Group Loan	50 000	3 000 000	4	Weekly	36.0

Source: MFTransparency, 2012

Loans from Ecumenical Church Loan Fund (ECLOF): Ecumenical Church Loan Fund (ECLOF) is an ecumenical non-profit making organization based in Geneva (Switzerland) founded in 1946. Tanzania National ECLOF Committee (ECLOF -Tanzania) is a member of the ECLOF Global family. ECLOF Tanzania was established in 1961 under the auspices of the Christian Council of Tanzania to give loan to churches and church related institutions. Following its collapse in the 1980s ECLOF Tanzania started operations in 1994 after being registered as a society under Society Ordinance [cap 327]. The board membership was expanded to include Protestant Churches, Catholic Church, Non-Governmental Organizations (NGOs) and MFIs involved in lending, informal sector entrepreneurship promotion and development.

ECLOF Tanzania has a total of five loan products including (a) Jitegemee scheme, (b) Jikwamue Scheme, (c) Diakonia scheme, (d) Apex lending scheme and (e) Kipato scheme. However, only the Jikwamue product is relevant in this study due to lending modality and loan amount. Jikwamue loan product targeted individuals who were directly involved in enterprises like food vending, kiosk and retail shops. Loans under this scheme were released through solidarity groups. Loan size varied from TZS 200 000 to TZS 1 000 000. Loans were arranged into four levels. Interest rate for the first to three levels was 30% while for the fourth level the interest rate was 25%. Other credit costs were weekly deposit of TZS 1000 as “loan guarantee fund”.

Table 20: Loan amount and repayment arrangement for Jikwamue product

Loan Level	200 000 (1st)	400 000 (2nd)	700 000 (3rd)	1000 000 (4th)
Payment period (Weeks)	25	25	40	50
Interest rate per annum (%)	30	30	30	25

Source: ECLOF - Arusha, 2012

The findings on loans from MFIs showed that microcredit products were associated with stringent lending conditions. It should be noted here that while banks offered an interest rate of 24% had per year MFIs interest rate was as high as 48% per year. On this aspect, the findings confirm those of some previous studies which indicated that MFIs attached their products with high interest rates in order to gain profit (Roodman, 2011; Rosenberg *et al.*, 2009; Ruben, 2007). An important point to note is that such high interest rates were likely to constrain the performance of women owned microenterprises especially when the cost of credit outweighed net profit obtained from the business.

In addition, loan products from microfinance institutions were associated with short repayment period of up to three months and were also stiffen to weekly repayments. Nonetheless, short repayment periods which involved weekly repayments were typical of Grameen Bank's group lending model, which was adopted by MFIs in Tanzania. Further the findings showed that loan size (amount) for the first cycle was as low as 10 000 TZS. This amount was by all means too small to boost the performance of women owned microenterprises. This point is well supported by a number of previous studies which concluded that small-size loans which constitute microcredit can hardly suffice the actual business needs to grow or expand (Morduch, 2000; Guinnane, 1999; Mosley and Hulme, 1998). Yet, there were costs of credit like prior savings of up to 20% of the expected loans for some MFIs, weekly forced savings and processing fees. In sum, therefore, the findings indicated that the lending conditions by MFIs were prohibitively expensive to women owners of microenterprises in Tanzania.

4.3.2 Utilization of credit

Borrowers were asked to indicate whether they had used part of the borrowed money to finance other household requirements than the businesses. It was found that out of 217 borrowers, 79 (36.4%) used part or all of the borrowed money to finance other household requirements than businesses. The proportion of utilization of borrowed money to finance business (for which the borrowing was formally intended) varied widely from 0 to 100%. The study found out that 14 (6.5%) of all borrowers had used all of the borrowed money to finance other household requirements than business. This means that what went to the business was zero amount of the borrowed sum. On the other hand the findings revealed that 136 (62.7%) used all of the borrowed money (i.e.100%) to finance their businesses. The findings further revealed that the average amount of loan used in business was 79.7%.

Further analysis of proportions of loan used on business was put into five categories and revealed that about two-thirds of borrowers [141 (65%)] used between 81 and 100% of the borrowed amount to finance business. It was also showed that 15 (6.9%) of borrowers used between 0 and 20% of loans in the business; 15 (6.9%) used between 21 and 40% in business, 26 (12.0%) used between 41 and 60% while other 20 (9.2%) used between 61 and 80% in business. Fig. 4 provides the details.

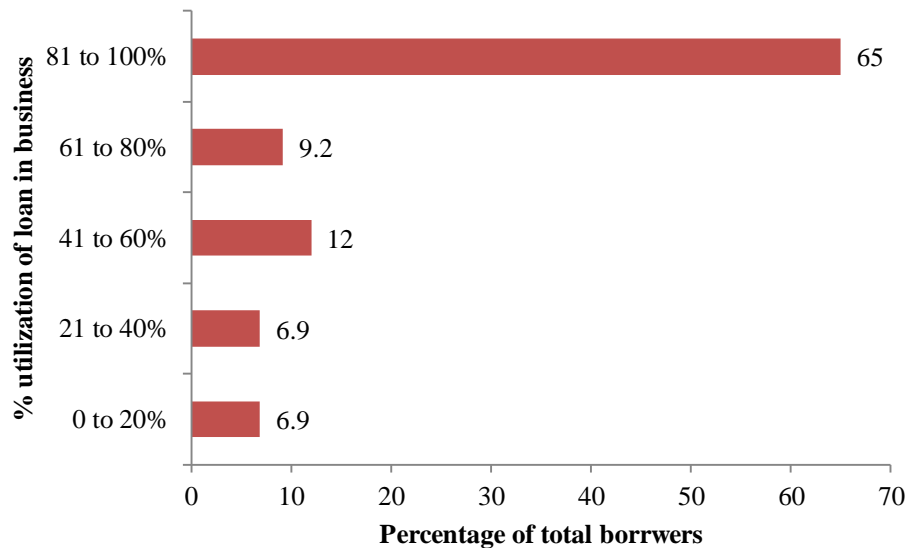


Figure 4: Proportion of loan used to finance business (n=217)

Similar evidences were found in secondary data obtained from SEDA's Headquarters in Arusha. Those findings revealed that borrowers used part of borrowed money to finance other households' needs than the businesses for which the borrowings were intended. The borrowed money was used to finance children's education, buy food, construct houses, purchase assets and cater for medical expenses, among others. Details about allocation of borrowed money are presented on Fig. 5 below.

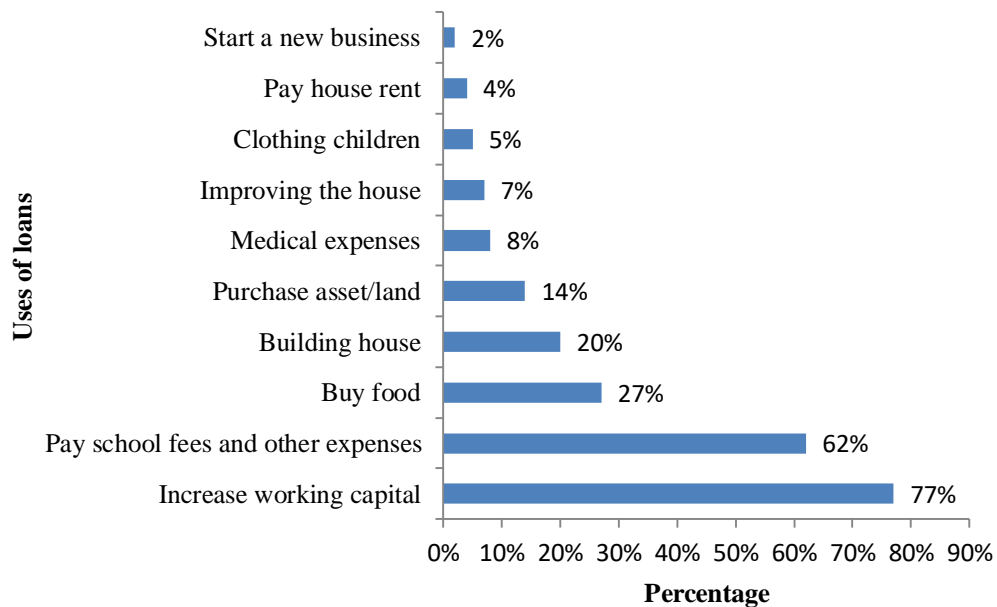


Figure 5: Different uses of loan from SEDA (n=633)

Source: SEDA National Office in Arusha; March 2012

The findings (Fig. 4 and 5) show that, although in principle loans were meant to help borrowers to finance their existing businesses, quite a number of borrowers had diverted the borrowed money to finance other household pressing needs. Qualitative evidence collected from the field also revealed similar practices of diverting borrowed money to finance other household needs. One of the experienced borrowers was quoted as saying:

“You see? The first thing I did after obtaining loan was to pay rental charges for the house I was living in. I had delayed for three months and the land lord was about to kick me out” [Six times borrower from PRIDE: Dar es Salaam city]

Use of borrowed money for other purposes than business propagation among Tanzanian borrowers has also been reported in previous studies. For example, in a survey of 216 micro and small enterprises in Arusha, Dar es Salaam and Morogoro, Kuzilwa (2005)

found that only 14.4% of the total borrowed money was used to invest in the clients' business. Similar evidences also emerged from other studies showing that women borrowers from different schemes used substantial part of the loans to meet their consumption needs (Johnston and Morduch, 2008; Beck *et al.*, 2007). The findings, therefore, make it clear that, to some women owners of microenterprises, the motive to borrow does not always arise from the need to finance their already existing businesses, but sometimes other household pressing needs.

4.3.3 Performance of business with credit and those without

An independent samples t-test for mean comparison was carried out in order to determine whether there was any difference between businesses whose owners had borrowed and those whose owners had not. In this test, the three aforementioned business performance indicators namely total sales, net profit and business net worth were used as test variables. The business owners' borrowing statuses (1 = Yes and 2 = No) were as grouping variables. The results were as presented in Table 21.

Table 21: Group statistics for independent t-test

Borrowing status		n	Mean (TZS)	Std. Deviation	Std. Error Mean
Total sales	Borrowers	217	1 363 645	909 594.345	61 747.288
	Non-borrowers	183	1 103 961	860 620.054	63 618.865
Net profit	Borrowers	217	568 154	506 477.648	34 381.943
	Non-borrowers	183	486 205	414 298.241	30 625.807
Business net worth	Borrowers	217	641 432	648 230.191	44 004.733
	Non-borrowers	183	504 690	689 702.474	50 984.274

The mean sale for borrowers was TZS 1 363 644 while for non-borrowers was TZS 1 103 961. Net profit for borrowers was TZS 568 154 while for non-borrowers was TZS 486 205. Business net worth for borrowers was TZS 641 432 while for non-borrowers it was TZS 504 690. The results on the difference between performance of the businesses of borrowers and non-borrowers are presented in Table 22 below.

Table 22: Results for independent t-test for equality of means

Business performance indicator	F	Sig.	T	Df	Sig. (2-tailed)	Mean	Std. Error
						Difference	Difference
Total sales						259	
	1.92	0.17	2.92	398	0.004	683.79	89 075.82
Net profit	2.77	0.1	1.75	398	0.081	81 948.85	46 828.53
Net business worth	0.03	0.87	2.04	398	0.042	136 742.5	669 93.93

It was found that borrowers had statistically significant higher total sales (Mean = TZS 1 363 645, SD = 909 594.345) than non-borrowers (Mean = TZS 1 103 961, SD = 954 909.391), $t(398) = 2.92$, $p < 0.01$. It was also found that their net business worth was statistically and significantly higher for borrowers (Mean = TZS 641 432, SD = 648 230.191) than for non-borrowers (Mean = TZS 504 690, SD = 689 702.474), $t(398) = 2.04$, $p < 0.05$. However, the findings revealed that there was no statistically significant difference in net profit for borrowers (Mean = TZS 568 154, SD = 506 477.648) and that of non-borrowers (Mean = TZS 486 205, SD = 414 298.241), $t(398) = 1.75$, $p > 0.05$.

The findings show that borrowers' businesses performed significantly better than those of non-borrowers in terms of total sales and net business worth. Although the average business net profit for businesses of borrowers was larger than that of businesses of non-borrowers (see Table 22), the difference was not statistically significant. Based on these

results, the first null hypothesis which stated “*Sales revenue, net profit and business net worth of microenterprises whose owners received microcredit do not differ significantly from those whose owners did not*” was rejected.

It is important to note that a previous study also found that businesses of borrowers performed better in terms of sales (Kessy, 2009) and also business net worth (Barnerjee *et al.*, 2009). However, the findings do not support those of a study by Barnes *et al.* (2001b) in Zimbabwe’s ZAMBUKO Trust which revealed that access to microcredit did not have any impact on the ownership of fixed assets for the business. On the aspect of net profit, the study contradicts other previous studies that established that businesses of borrowers were performing significantly higher than those of non-borrowers. Those studies include one by Nanor (2008) in Ghana and another one by Gubert and Raubaud (2005) in Madagascar.

A critical look at the findings in Table 22 gives rise to this question: Why positive and significant effect on sales and business net worth but not on profit? This situation can, probably, be explained as follows. When women owners of microenterprises got hold of borrowed money, the first thing they did, other than smoothening their household consumption, was to restock their businesses. By restocking the businesses it means that they would have more goods to trade on, and this explains why they had significantly higher sales than non-borrowers. Accordingly, borrowers got lump sums that they could immediately use to purchase productive business assets than the non-borrowers who struggled to make savings from little profit they got. However, when it comes to profit, things become different. Although borrowers had had relatively high sales, they too had to incur high costs of frequent repayment including transportation, meals and paying for

defaulters. Given these costs, their monthly profits tended not to differ significantly from those of non-borrowers.

4.4 The Correlations between Business Performance and Credit Characteristics

4.4.1 Size of credit and business performance

The respondents were asked to state the sizes of their most current loans. The current loan was the latest one that had been taken within the previous five years, but not in 2012. It was found that the minimum loan size was TZS 25 000 while the maximum loan was TZS 2 500 000. The average loan size was TZS 407211. Relationship between size of credit (amount borrowed) and the performance of women-owned microenterprises was measured by carrying out Pearson's correlation analysis because the dependent and independent variables were measured at the ratio level. The performance measures involved included total sales, net profit and business net worth. The results were as presented in Table 23.

Table 23: Correlation between size of credit and business performance (n=202)

	Size of credit	Total sales	Net profit	Business net worth
Amount borrowed	1.000			
Total sales	0.300*** (0.000)	1.000		
Net profit	0.131 (0.064)	0.801*** (0.000)	1.000	
Business net worth	0.307*** (0.000)	0.275*** (0.000)	0.191** (0.006)	1.000

*** Correlation is significant at the 0.001 level (2-tailed) **. Correlation is significant at the 0.01 level (2-tailed).

The findings revealed that there was significant positive correlation between loan size (amount borrowed) and total sales ($r = 0.300$, $p < 0.001$). There was also significant

positive correlation between size of loan and business net worth ($r = 0.307$, $p < 0.001$). Also, there was positive statistically insignificant correlation between size of credit and net profit ($r = 0.13$, $p = 0.064$). Based on these findings, the second null hypothesis of this study which stated that “*there is no significant correlation between size of loan received and the performances of women owned microenterprises in terms of sales revenue, net profit and business net worth*” is rejected.

Qualitative findings collected through focus group discussions also revealed that an ample size of loan was useful in business performance. According to them, they could expand their businesses in terms of having more goods and services to trade if they had access to more money. One of them was quoted saying:

“If I could get enough capital, I could have more things to sell here. I would be selling things like potatoes, onions, sugar and soap. The problem is that I do not have enough capital (Borrower, Dar es Salaam City)

Similarly, another respondent who was a tailor was quoted saying:

“With enough capital, I could manage to have different colours and types of clothes. I could also manage to buy a better sewing machine and hire a better place. As you can see for yourself this location is not safe. Normally, men pass here with heavy sacks which can accidentally fall on us” (Borrower, Mwanza City)

The above findings, therefore, suggest that size of credit (amount borrowed) was one of the useful inputs to the performance of women owned microenterprises. These findings

correspond to those of a previous study by Vogelsang (2001) in Bolivia which revealed that higher loan sizes generated higher revenues and higher levels of assets than lower loan sizes did. However, the findings revealed that size of loan and net profit were not correlated at a statistically significant level. The implication of these findings is that borrowers quickly spent the borrowed money to restock their businesses or purchase business assets. However, since the borrowed sums were as small as TZS 25 000, their businesses could not fetch enough profit to guarantee sustainable investments and expansion. This view is well supported by an empirical study by Kuzilwa (2005) which revealed that women owners of restaurants in Morogoro region failed to expand their businesses due to inadequate credit. The stance is also supported by evidence from Kenya showing that credit clients failed to make significant investment on their businesses because the loans were too small to do so (Otieno *et al.*, 2011).

4.4.2 Interest rate per annum and business performance

In this study, the interest rates varied from one borrower to another and also from one lending source to another. It should also be noted that interest rate was determined by size of loan borrowed and repayment period. The interest rate per annum varied from 5% for borrowers from Village Community Bank (VICOBA) to 600% for borrowers from individual money lenders. The average interest rate was 52.19% per year. The relationship between interest rate and the performance of women owned microenterprises was determined by correlating the same with the three performance measures namely total sales, net profit and net business worth. The results of that correlation analysis are presented in Table 24 below.

Table 24: Correlation between interest rate and business performance (n=202)

Variable	Interest rate	Total sales	Net profit	Business net worth
Interest rate	1.000			
Total sales	-0.178*	1.000		
	(0.011)			
Net profit	-0.137	0.801***	1.000	
	(0.053)	(0.000)		
Business net worth	-0.194**	0.275***	0.191**	1.000
	(0.006)	(0.000)	(0.006)	

*** Correlation is significant at the 0.001 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed)

The results of Pearson's correlation analysis revealed that interest rate was negatively correlated with sales ($r = -0.178$, $p < 0.05$) and with business net worth ($r = -0.137$, $p < 0.01$) at significant levels. Interest rate was also negatively correlated with net profit although not at a statistically significant level ($r = -0.137$, $p = 0.053$). The interpretation of these findings is that there was an inverse relationship between interest rate and the three business performance indicators used in this study. According to these findings, therefore, the third null hypothesis of this study which stated that "*there is no significant correlation between interest rate of loan received and performance of women owned microenterprises in terms of sales revenue, net profit and business net worth*" is rejected.

In fact, the findings show that there was negative correlation between interest rate and business performance. The implication of these findings is that annual interest rates associated with microcredit products were too high to allow firms make profit and investments. Due to high interest rates on the loans, some of women owners of microenterprises had decided to stop borrowing after discovering that their businesses were not growing. This happened when the output of the business for which money was

borrowed was not big enough to meet the loan repayment obligations. In one of the focus group discussions in Arusha city, a participant was quoted as saying.

“I have stopped borrowing because repayment of the previous two loans was difficult. After repayment of those loans the shop was empty again. What I have learnt is that weekly deposits exceeded the weekly profit. Every week I worked very hard but had to take the whole of profit generated to pay the loan. We borrow in order to be able to do business but at the end we do not get anything (Former PRIDE borrower: Arusha City).

The findings confirm the evidences of the previous studies which concluded that high interest rates prevented investments that produced high returns (Fernando, 2006), increased indebtedness among borrowers because their businesses could not produce enough profit to offset debts due to loans (Stewart *et al.*, 2010, Schicks, 2011) and also constrained the financial stability of microenterprises (Kayunze *et al.*, 2005). A point to emphasise here is that the average interest rate of 52.19% per annum was too high for women-owned microenterprises to result into good performance in terms of total sales, net profit and net business worth. However, due to financial illiteracy, some women did not even bother to know about the interest rates on the loans they applied for. To them what mattered most was the sum of money they would receive and the amount they were supposed to pay weekly. In a focus group discussion, one of the borrowers was quoted as saying.

“Among the women borrowers, very few ask about the interest rates. We encourage each other to go and borrow especially when we hear that one

can get such a big amount as TZS 400 000. For instance, when one gets information that her repayment is ten thousand per week for twelve months she ends up thinking that she has been given money for free. The problem comes when she has to pay from a business which sometimes does not exist” (Borrower: Arusha City).

Further discussions revealed that some of the women borrowers had never received such a big amount of money as TZS 400 000 in their lives. They were, therefore, happy when they discovered that they could borrow such huge sums of money from MFIs and obviously they were ready to do whatever it would take, including bribing some of local government and loan officers, to ensure that their loans were approved. It is, therefore, worth noting that financial illiteracy made some women borrow from sources which offered credit with exorbitant interest rates.

4.4.3 Loan repayment period and business performance

In this study, the repayment period was the duration for which the borrowed amount was to be completely repaid with interest. The duration was measured in weeks since some borrowers, especially ones who borrowed from MFIs, would make deposits weekly. The findings revealed that repayment periods ranged from 4 to 52 weeks. The average repayment period was 28.6 weeks.

Pearson’s correlation analysis was carried out to determine whether repayment period was correlated with the three business performance measures namely total sales, net profit and net business worth. The results were as presented in Table 25 below.

Table 25: Correlation between repayment period and business performance (n=202)

Variable	Repayment period	Total sales	Net profit	Business net worth
Repayment period	1.000			
Total sales	0.221**	1.000		
	(0.002)			
Net profit	0.168*	0.801***	1.000	
	(0.017)	(0.000)		
Business net worth	0.429***	0.275***	0.191**	1.000
	(0.000)	(0.000)	(0.006)	

*** Correlation is significant at the 0.001 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

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

The findings revealed that there was positive and statistically significant correlation between loan repayment period and total sales ($r = 0.221$, $p < 0.01$), between repayment period and net profit ($r = 0.168$, $p < 0.05$) and between repayment period and business net worth ($r = 0.429$, $p < 0.001$). The findings imply that longer repayment period enhance business performance. Based on these results, therefore, the fourth null hypothesis of this study which stated that “*there is no significant correlation between repayment period of loan received and the performance of women owned microenterprises in terms of sales revenue, net profit and business net worth*” is rejected.

The findings imply that businesses of borrowers who were given more flexible repayment options, in terms of loan repayment terms, were more likely to perform better than those of those who were to repay loans within short repayment periods. The findings corroborate those of previous studies showing that flexible repayment period made it possible for borrowers to get more profit and invest on productive assets (Field and Pande, 2008; Field *et al.*, 2011). The role of longer repayment period is emphasised by Field *et al.* (2011) observing that immediate repayment obligation distorted investment in microenterprises financed through credit.

4.4.4 Borrowing experience and business performance

Respondents were asked to indicate whether they had participated in repeated borrowing experienced. The findings revealed that out of the 217 borrowers, 76 (35%) had repeated borrowing experience while 141 (65%) had not. The borrowing frequency ranged from 1 to 14 times. The average borrowing frequency was 1.92. The borrowing experience was calculated as total number of weeks for which a borrower had been on the loan(s), and it ranged from 4 to 468 weeks, with the average of 55.3 weeks. To determine whether there was relationship between borrowing experience and business performance, Pearson's correlation analysis was carried out, and the results were as presented in Table 26.

Table 26: Correlation between borrowing experience and business performance
(n=202)

Variable	Borrowing experience	Total sales	Net profit	Business net worth
Borrowing experience	1.000			
Total sales	0.237*** (0.001)	1.000		
Net profit	0.079 (0.261)	0.801*** (0.000)	1.000	
Business net worth	0.098 (0.167)	0.275*** (0.000)	0.191** (0.006)	1.000

*** Correlation is significant at the 0.001 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

The findings reveal that there was positive and statistically significant correlation between borrowing experience and total sales ($r = 0.237$, $p < 0.001$). Further, the findings revealed that there was positive but insignificant correlation between borrowing experience and net profit ($p = 0.261$) and also between borrowing experience and business net worth

($p = 0.167$). The findings, therefore, suggest that long participation in microcredit schemes (long borrowing experience) was unlikely to have positive effect on profitability and business investment determined by business net worth. Based on these findings the fifth null hypothesis which stated that “*there is not significant correlation between the borrower’s experience in receiving loans and the performance of women owned microenterprises in terms of sales revenue, net profit and business net worth*” is accepted.

Nonetheless, it appears that continued participation in microcredit schemes increased burden among women owners of microenterprises. At this point, an important question is: why should the benefits of loans on business performance decrease as the time of participation in credit schemes increases? In a key informant interview, SEDA Loans’ Manager explained this situation as follows. In the first loan cycles, new entrants in the loan schemes worked hard to repay their loans so as to impress the lender and thus qualify for other subsequent rounds with more funds. This could even involve borrowing from other sources in order to service their earlier loans. According to him, increased borrowing from other sources culminated in increased indebtedness among women borrowers and that was one of the reasons why some of them ended up losing household items, which were auctioned by fellow solidarity group members. This view is supported by several authors noting that entrepreneurs have an incentive to repay loans because in the next loan cycle they can obtain more financing (Armendáriz de Aghion and Morduch, 2005; Cull *et al.*, 2007).

At this point it might be important to note that some long-time participants in credit schemes lost their savings to MFIs to compensate for defaults by fellow group members. This can also explain why borrowing experience did not have significant positive

relationship with business performance. In focus group discussions, former borrowers were quoted saying:

“Some of group members were not repaying their loans....At times we ended up being locked up in a room for hours. We also lost our savings with them (MFIs) to compensate for what the defaulters had taken away. I decided not to borrow anymore. I rely on little capital that was given to me by my husband” (Former PRIDE borrower; Dar es Salaam City)

Another focus group discussant was also quoted saying:

“The problem was with group arrangements. I was so disappointed when they deducted my savings in order to compensate for loses due to fellow group member who had defaulted....The defaulter was a man (machinga) who disappeared after paying half of 400 000 TZS that he had borrowed” (Former BRAC borrower; Mwanza City)

The above findings imply that the businesses of women who were in loan schemes for long time were likely to perform poor because of frequent loses of part of their profit to compensate for the defaulters in the joint-liability borrowing groups. This position is particularly supported by empirical evidences showing that households of clients who had participated for long time were likely to fall into poverty than non-clients (Barnes *et al.*, 2001b; Lakwo, 2006). Also, long-time participants in loan schemes were at risk of becoming over indebted especially if they were to borrow from other sources in order to be able to pay for current loans. This is line of argument is supported by Coleman (2002) noting that due to small size of loans, borrowers have to occasionally turn to money

lenders for more loans to finance loan repayment thus making them even poorer than they were before.

4.5 The Effects of Credit Characteristics on Business Performance

The effects of credit characteristics namely loan size (*size*), interest rate (*interest*), repayment period (*repayment*) and borrowing experience (*experience*) on business performance in terms of total sales (*tsales*), net profit (*nprofit*) and business net worth (*networth*) were estimated by using a linear multiple regression model. During the analysis the researcher checked for the required pre-conditions for carrying out meaningful analysis including checking whether all the variables involved were normally distributed, as explained in the methodology chapter (Section 3.5).

4.5.1 Effects of credit characteristics on total sales

The results of regression analysis showed that using the enter method, the model was significant ($F_{4, 176} = 16.167$, $p < 0.001$, $R^2 = 0.252$). Size of credit (Beta = 0.410, $p < 0.001$) and borrowing experience (Beta = 0.195, $p = 0.049$) had statistically significant positive effects on total sales. The remaining two credit characteristics namely interest rate (Beta = -0.096, $p = 0.203$) and repayment period (Beta = -0.102, $p = 0.333$) had negative but statistically insignificant effects on total sales. The detailed findings are presented in Table 27 below.

Table 27: Regression results on the effect of credit characteristics on total sales

Independent variables	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(Constant)	4.459	0.311		14.325	0.000		
size	0.304	0.062	0.410	4.947	0.000	0.604	1.657
interest	-0.073	0.057	-0.096	-1.277	0.203	0.731	1.369
repayment	-0.093	0.096	-0.102	-0.971	0.333	0.380	2.632
experience	0.125	0.063	0.195	1.983	0.049	0.429	2.332

Dependent Variable: tsales ($R^2 = 0.252$)

The findings in Table 27 revealed that credit characteristics could account for variance of 25% of total sales of women owned microenterprises. Size of credit and borrowing experience were two significant predictors of total sales revenue with positive effect. On the aspect of size of credit, the findings support those of previous studies which established that higher loans size generated higher revenue (Vogelsang, 2001; Kuzilwa, 2005; Otieno *et al.*, 2011). Borrowing experience was a significant predictor with positive effect on total sales. This can be explained by the fact that long-time borrowers were also experienced business women in specific industries. Long time experience in business was likely to provide long-time borrowers with an advantage of having more contacts with suppliers, contractors, and customers (Cooper and Gimeno-Gascon, 1992; Rauch and Frese, 2000), aspects that would boost the performance of their businesses through increased sales.

4.5.2 Effects of business characteristics on net profit

The results of regression analysis revealed that, using the enter method, the model was significant ($F_{4, 176} = 5.65$, $p < 0.001$, $R^2 = 0.094$). The findings revealed that size of credit

was the only predictor variable with a statistically significant positive effect on net profit (Beta = 0.268, $p = 0.004$). Interest rate (Beta = -0.020, $p = 0.813$) had negative but statistically insignificant effect on net profit. Repayment period (Beta = 0.076, $p = 0.504$) and borrowing experience (Beta = 0.020, $p = 0.853$) had positive but statistically insignificant effects on net profit.

Table 28: Regression results on the effect of credit characteristics on net profit

Independent variables	Unstandardized		Standardized			Collinearity	
	Coefficients		Coefficients			Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(Constant)	4.246	0.408		10.407	0.000		
size	0.235	0.08	0.268	2.922	0.004	0.599	1.668
interest	-0.018	0.074	-0.020	-0.237	0.813	0.731	1.367
repayment	0.083	0.124	0.076	0.67	0.504	0.389	2.569
experience	0.015	0.081	0.020	0.185	0.853	0.431	2.322

Dependent Variable: nprofit ($R^2 = 0.094$)

The findings revealed that credit characteristics accounted for the variance of 9% of net profit of the businesses of women borrowers. Size of credit was the only significant predictor of net profit. This specific finding is supported by findings of a study by Godguin (2004) which found that there was linear relationship between loan and profit that a firm can make. It is also shown that interest rate had negative effect on net profit of those businesses. This negative effect can be explained by the fact that high interest rates on, sometimes small loans, increased indebtedness among borrowers because their businesses could not produce enough profit to offset loans (Stewart *et al.*, 2010; Schicks, 2011).

4.5.3 Effect of credit characteristics on business net worth

The results of regression analysis showed that using the enter method, the model was significant ($F_{4, 172} = 17.889$), $p < 0.001$, $R^2 = 0.277$). However, the results showed that size of credit (Beta = 0.308, $p = 0.001$) and repayment period (Beta = 0.399, $p < 0.001$) had significant positive effects on business net worth. Interest rate (Beta = -0.014, $p = 0.851$) and borrowing experience (Beta = -0.135, $p = 0.174$) had negative but statistically insignificant effect on business net worth.

Table 29: Regression results on the effects of credit characteristics on business net worth

Independent variables	Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics			
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(Constant)	3.221	0.482		6.680	0.000		
size	0.346	0.098	0.308	3.541	0.001	0.544	1.839
interest	-0.017	0.089	-0.014	-0.188	0.851	0.717	1.394
repayment	0.564	0.147	0.399	3.830	0.000	0.379	2.641
experience	-0.129	0.094	-0.135	-1.364	0.174	0.418	2.392

Dependent Variable: networkth ($R^2 = 0.277$)

The findings show that credit characteristics accounted for about 28% of variance in business net worth. Size of credit was found to be a significant predictor of business net worth with a positive effect while interest rate had negative effect. This finding can be explained as follows. If a borrower received an ample size of loan, she could immediately buy some of the business assets and thus the value of fixed assets would increase. However, since the interest rates of loans were sometimes higher than the rate of return of businesses of borrowers (Stewart et al., 2010), loans became burdens. This also explains the reason why continued participation in credit schemes i.e. borrowing experience had

negative effect on business net worth. It is worth noting that the continued participation in microcredit schemes could make borrowers lose their assets, especially if they had to sell them in order to be able to make weekly repayment deposits. This view is supported by findings of a study by Barnes *et al.* (2001b) which revealed that households of clients who participated in a credit scheme in Zimbabwe for long time were likely to own fewer assets than those of non-clients.

4.5.4 Summary of regression model results

Table 30 below provides a summary on the effects of size of loan, interest rate, repayment period and borrowing experience on each of the three indicators of business performance, namely (a) total sales (tsales), (b) net profit (nprofit) and business net worth (networth). The summary contains descriptions about beta and p values showing whether the effect was significant or not. The summary also provides information on the model summary (Adjusted R^2) showing the size of the effect of the aforementioned four credit characteristics on each of the business performance measures.

Table 30: Summary of regression results

Dependent Variable	Model summary	Descriptions	Independent variable			
			Size of loan	Interest rate	Repayment period	Borrowing experience
Total sales (tsales)	$R^2 = 0.25$	Beta	0.41	-0.096	-0.102	0.195
		P value	0.000	0.203	0.333	0.049
Net profit (nprofit)	$R^2 = 0.09$	Beta	0.268	-0.020	0.076	0.020
		P value	0.004	0.813	0.504	0.853
Business net worth (networth)	$R^2 = 0.28$	Beta	0.308	-0.014	0.339	-0.135
		P value	0.001	0.851	0.000	0.174

The summary of the regression findings above show that credit accounted for 25% of women owned business total sales, 9% of net profit and 28% of business net worth. The findings in Table 30 show that all the three models were weak and this can be explained by two reasons. First, borrowers used part of borrowed money to finance other household requirements than business (see Fig. 5). Accordingly, part of the borrowed money was used to purchase household assets, to finance construction of living houses and in paying for children's education (see Section 4.6). Based on these facts, therefore, it is clear that only part of credit went into business and thus its effect on the business performance would also be partial. Second, the performance of women owned microenterprises is a function of many factors, including social and institutional ones, among others. Credit, therefore, accounted for just part of those many factors.

Nonetheless, based on the findings that predictive models for the effects of credit characteristics on total sales (Table 27), net profit (Table 28) and business net worth (Table 29) were significant, the sixth null hypothesis which states that "*credit characteristics including size of loan, interest rate, repayment period and borrowing experience do not have significant effect on business performance in terms of sales revenue, net profit and business net worth*" is rejected.

4.6 Contribution of Microcredit to Household Welfare

4.6.1 Access to credit and household investment on health and education

Qualitative evidences collected through focus group discussions revealed that women borrowers, especially those who borrowed from MFIs, did so in order to finance household requirements like education and health service for children. Particularly, the financing of children's education involved paying school fees for children in secondary schools or in colleges. Some of the FGD participants were quoted saying:

“With the loans, I have been able to educate four of my children in secondary schools. I have also been able to take my children to hospitals when they were sick. There is nothing else that I have done”. (Borrower from SEDA, Arusha city)

“Loans have helped me. The profit I get out of my business has enabled me to finance secondary education for two of my children” (Borrower from PRIDE, Mwanza city)

“Frankly speaking, I borrow for school fees and sometimes to buy animal feeds. I cannot put TZS 450,000 into this business....I have educated three of my children; two have completed secondary school and one a tourism course” (Borrower from SACCOS, Arusha city)

The findings above show that borrowers had used part of the loaned money to pay school fees for their children. Here the interpretation is that they had made long-term investment on their children through enabling them acquire education. On this aspect, the findings corroborate those of previous studies in Ghana (Adjei et al., 2009), Rwanda (Lacalle et al., 2008) and Zimbabwe (Barnes et al., 2001b). An important point to note is that some women borrowed exclusively to finance other household needs like children’s education as opposed to business financing. This is evidenced in the first testimony above where the borrower indicated that there is nothing else she had done with the borrowed money than educating her children. This is contrary to stated (formal) intention in the borrowing contract with MFIs.

4.6.2 Credit and ownership of living houses

Respondents were asked to indicate if their households owned living houses. Those whose households owned living houses were further required to indicate whether they had constructed those houses using loan that was accessed within the previous five years or not. It is important to note here that according to Tanzania National Household Budget Surveys, ownership of living houses was one of the economic indicators of wealth and social status (URT, 2014:25).

The findings revealed that 132 (33%) of all 400 respondents owned living houses. On this aspect, the proportion of households owning living houses in this study was lower than the one obtained from the 2011/12 National Household Budget Survey (NBS, 2014) where 57.9% of all respondents from urban areas owned living houses. Nonetheless, the variation can be explained by the fact that the HBS involved a wider sample of people with different types of business while this study was confined to women owners of microenterprises only. The findings further revealed that among them 86 (21.5%) were borrowers, who had used part of the borrowed money to finance construction of living houses, while 46 (11.5%) were non-borrowers. Proportionally, therefore, more households of borrowers (36.9%) than those of non-borrowers (25.1%) owned living houses.

Table 31: Distribution of respondents by household ownership of living house

Borrowing status	The proprietor's household own a living house		
	Yes	No	Total
Borrower	86 (21.5%)	131 (32.8%)	217 (54.2%)
Non-borrower	46 (11.5%)	137 (34.2%)	183 (45.8%)
Total	132 (33.0%)	268 (67.0%)	400 (100%)

Pearson's chi-square = 9.434, $p < 0.01$

A chi-square test of independence was performed to examine the relation between access to credit and household's ownership of the living house among women proprietors. The relation between these variables was significant, $\chi^2 (1, N = 400) = 9.434, p = 0.002$.

The above findings (Tables 31), therefore, indicate that more households of women borrowers than non-borrowers owned living houses. Similar findings were also reported in a number of previous studies in Tanzania (Brannen, 2010), Uganda (Barnes *et al.*, 2001b), Rwanda (Lacalle *et al.*, 2008) and Ghana (Nanor, 2008; Adjei *et al.*, 2009). An important point to note here is that money used to finance construction of living houses constituted part of borrowed money as opposed to profit resulting from businesses. This is evidenced in the secondary data obtained from SEDA which revealed that 20% of borrowers used part of loans in the construction of living houses (see Fig. 5).

4.6.4 Access to credit and investment on household assets

Respondents were asked to indicate the types of consumable assets they owned. To that end, a list of asset items was read to women owners of microenterprises and they were to respond "YES" if their household owned that specific asset or "NO" if their household did not own it. The same was done to the ownership of productive assets. During data entry, YES responses were coded 1 while No responses were coded 0. This kind of coding was done so as to make the responses in a dichotomous scale as suggested in the literature (Vyass and Kumaranayake, 2006).

Principal component analysis using extraction method was conducted to find out whether there was difference between borrowers and non-borrowers in terms of ownership of consumable and productive assets. The aim was to construct household assets' indices for both groups so as to be able to tell the difference, if any. During the analysis three

important aspects namely determinant matrices (R-matrices), Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity were checked for. Literature suggests that R-matrix has to be greater than 0.00001 (Field, 2005, 2012:771). Values less than that indicated that variables were highly correlated and therefore there was multicollinearity effect. In this study R-matrix for borrowers was 0.105 while for the non-borrowers it was 0.118. Since both of the values were greater than 0.00001, it was confirmed that there was no Multicollinearity effect and therefore factor analysis could proceed.

Kaiser-Meyer-Olkin (KMO) measure of Sampling Adequacy and Bartlett's Test of Sphericity were requested for in the analysis. Literature suggests that KMO value must range from 0.5 to 1.0 for factor analysis (and implicitly principal component analysis) to be meaningful (Leech *et al.*, 2005). In this study KMO value for borrowers was 0.611 while for non-borrowers was 0.612. Both values were within the required range indicating that the sample was enough to guarantee factor analysis. The results of Bartlett's Test of Sphericity for borrowers were significant for both borrowers ($x^2 = 468.609$, $df = 91$, $p < 0.0001$) and non-borrowers ($x^2 = 374.493$, $df = 91$, $p < 0.0001$). Significant Bartlett's Test of Sphericity means that variables are correlated enough to provide for factor analysis (Field, 2005). The following table presents the detailed results.

Table 32: KMO and Bartlett's tests results

Name of test		Borrowers	Non-borrowers
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.611	0.612
Bartlett's Test of Sphericity	Approx. Chi-Square	468.609	374.493
	Df	91	91
	Sig.	0.000	0.000

The household assets' indices for borrowers and non-borrowers were constructed by using the scores of the first components. The scores of the first components were used because it accounted for larger variance than other components. (Fields, 2005; Filmer and Pritchett, 1998; Mckenzie, 2003; Mckenzie, 2005; Schellenberg *et al.* 2003; Vyass and Kumaranayake 2006; Labonne *et al.*, 2007). Results on the household assets' indices are presented below.

Table 33: Household assets' indices for borrowers and non-borrowers

Type of asset	Borrowers	Non-borrowers
Consumable assets		
Radio	0.385	0.463
Television	0.398	0.438
DVD player	0.301	0.357
Computer	-0.084	-0.016
Bicycle	-0.055	-0.060
Motorcycle	0.057	-0.032
Decoder	0.209	-0.109
<i>Mean index score</i>	0.173	0.149
Productive assets		
Refrigerator	-0.082	0.01
Sewing machine	-0.065	0.08
Juice blender	-0.013	-0.124
Gas cooker	0.017	0.038
Drier	0.094	0.031
Thermo flask/hot pots/food warmers	0.078	0.058
Kiosk/booth/room from which business operates	0.021	-0.002
<i>Mean index score</i>	0.007	0.013
<i>Total index score</i>	0.180	0.162

Taking into account the total mean index scores for both consumable and productive assets, the findings in Table 33 revealed that, on aggregate, borrowers' households had acquired more assets (total mean score= 0.180) than non-borrowers (total mean index score = 0.162). Specifically, borrowers' households owned more consumable assets than non-borrowers. This is evidenced in mean index score of 0.173 for borrowers and 0.149 for non-borrowers. This particular finding is supported by similar evidence from a number of previous studies which indicated that participation in microcredit schemes leads to better household and individual women's wellbeing (Nanor, 2008; Lacalle *et al.*, 2008; Barnes *et al.*, 2001b; Adjei *et al.*, 2009; Doocy *et al.*, 2005; Brannen, 2010).

Drawing from the asset index constructed, the borrowers owned more consumable assets than non-borrowers. Similar findings have also emerged from a number of previous studies (Brannen, 2010; Lacalle *et al.*, 2008; Barnes *et al.*, 2001a) indicating that participants in microcredit schemes stood better chances to acquire consumable assets. However, it was surprising to find out that households of non-borrowers (mean index score = 0.013) owned more productive assets than borrowers (mean index score = 0.007). On this aspect the findings contradict those of a study carried out in Ghana by Adjei *et al.* (2009) where borrowers owned more productive assets like refrigerators and sewing machines. The implication of the above findings is that stringent repayment conditions including high interest rate had negative effect on borrowers' ability to invest on productive assets. This is supported by another finding of this study presented earlier where interest rate had negative effect on business net worth which was a combination of fixed and current assets (Table 24).

4.7 Link between the Study Findings and Theory

This study adopted a resource-based theory of entrepreneurship which contends that access to resources is an important predictor of the overall performance of a business venture. The theory emphasises the role of three types of resources namely financial capital, human capital and social capital but only one was of interest in this study. This is essentially so because the study was conducted to assess the effect of microcredit on business performance and therefore was limited to the financial aspect of the theory only. Based on this background, the contributions of the study findings to the theory were as follows.

The findings revealed that borrowers' businesses were performing better than those of non-borrowers in terms of total sales and business net worth. It was also found out that businesses of borrowers were earning more profitable than those of non-borrowers, although the difference was not significant. The findings, therefore, affirmed that microcredit, which constitutes financial capital, was an important input to the performance of microenterprises as posited by the resource-based theory of entrepreneurship.

However, the findings showed that some credit characteristics had predictive power on the performance of businesses. Particularly, size of credit, interest rate, repayment period and borrowing experience were found to affect business performance either positively or negatively. The study's main contribution to the resource-based theory is that not all kinds of credit can guarantee business performance. In other words, there is a need to factor in the above mentioned four credit characteristics into the theory so as to re-ascertain the effect of the same on business performance.

4.8 Critical Evaluation of the Study

4.8.1 Contribution to knowledge

This study made important contribution to literature on the role of microcredit to the performance of borrowers' microenterprises. Particularly, the findings provided an affirmation that participation in microcredit scheme had positive results on both business performance and on borrowers' household welfare. This is contrary to a large body of literature that indicates that the same makes the borrower even poorer (Bateman and Chang, 2009; Dichter and Harper, 2007; Lont and Hospes, 2004; Mosley and Hulme, 1998; Mahjan, 1998; Adams and Von Pischke, 1992). The findings also provided new insights to the literature on how credit characteristics can affect business performance. This was done by creation of a model to estimate the effects of size of credit, interest rate, repayment period and borrowing experience on business performance. In terms of methodological approach, the study provided an alternative way of assessing the effect of microcredit on household welfare by constructing household asset index.

4.8.2 Set up of the study

The study was conducted in three major cities in Tanzania. The strength in terms of the set up was that most of MFIs lending to women owners of microenterprises in Tanzania were concentrated in urban areas and specifically in those three major cities. Accordingly, there were more women involved in microenterprises in those three cities and many of them were clients of MFIs. The selection of those cities, therefore, would give a more realistic picture about the dynamics of women microenterprises operations and effect of microcredit on business performance in particular. Nonetheless, the results of this study are unlikely to tell the story of the rural areas, at least, with specific details.

4.8.3 Methodological approach

The study adopted a cross-sectional research design. The study was not fully experimental and that could have implications on the validity of the findings. The researcher believes that adoption of longitudinal design could provide better results but it is worth noting that adoption of cross-sectional design was caused by limited time of maximum of four years allocated for the PhD programmes offered by Sokoine University of Agriculture. Nonetheless, this study provided better assessment of effect of microcredit on business than previous studies conducted in Tanzania by treating both borrowers and non-borrowers. Further, the study adopted a mixture of qualitative and quantitative approach whereby the two types of data would complement each other. The latter was done with the intention of increasing the validity of the findings collected.

CHAPTER FIVE

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The findings of this study revealed that businesses of borrowers were performing better than those of non-borrowers in terms of total sales and net business worth. It was also shown that the average business net profit for borrowers was higher than that of non-borrowers, although that difference was not statistically significant. It is, therefore, concluded that participation in microcredit schemes improves the performance of women owned microenterprises.

The findings also showed that size of loan was positively correlated with total sales revenue and business net worth. According to this finding, it is concluded that amount of loan is an important determinant of the performance of women owned microenterprises. This conclusion draws its logic from the fact that women microenterprises in Tanzania were capital constrained and that microcredit schemes are the only viable source of business finance at their disposal.

Interest rate was negatively correlated with all the three business performance indicators, namely total sales revenue, net profit and business net worth. The multiple linear regression model results also showed that interest rate had negative effect on the business performance indicators. Based on these findings, it is concluded that performance of businesses of women borrowers was hampered by high interest rates offered by MFI and individual money lenders, among other things.

Loan repayment period was positively correlated with all the three indicators of business performance which were total sales, net profit and business net worth at a statistically significant level. This means that businesses of women who were given ample time to repay their loans performed better than those of women who were given short repayment time. Therefore, it is concluded that in order for microcredit to be useful for business performance, the repayment period has to be flexible and long enough to enable borrowers to make returns on investment before they start repayment.

Borrowing experience was positively correlated with total sales at a statistically significant level. However, there was no statistically significant correlation between borrowing experience and net profit and between borrowing experience and business net worth. This study, therefore, concludes that long participation in microcredit schemes does not lead to better performance of the participants' businesses.

The four credit characteristics, namely loan size, interest rate, repayment period and borrowing experience had significant effects on business performance in terms of sales revenue, net profit and business net worth. It is, therefore, concluded that the effectiveness of microcredit in the performance of microenterprises has to be determined by size of loan, interest rate, repayment period and borrower's experience in receiving similar loans.

Further, the findings revealed that borrowers had more assets than non-borrowers including living houses. Furthermore, qualitative evidence showed that borrowers had used part of borrowed money to finance their children's health and education. The conclusion of this study, therefore, as opposed to conclusions of many other previous studies, is that participation in microcredit schemes improves the participants'

households' welfare through accumulation of assets. Therefore, microfinance, of which one of the approaches involves issuing small loans called microcredit, is not an "illusion" as contended by Bateman and Chang (2009) nor "the world of make believe" as concluded by Lont and Hospes (2004).

5.2 Recommendations

The study concluded that participation in microcredit schemes improves the performance of women owned microenterprises. However, not all women owners of microenterprises have access to loans from MFIs or from government-funded programmes. It is recommended that the Government of Tanzania should scale up the outreach of microcredit services to women through its specific microcredit schemes like Women Development Fund, Women's Bank, SIDO and others. Broad coverage by microcredit will result in mass eradication of poverty through the informal sector which accommodates a significantly large number of women in the country.

It was concluded that size of loan is an important determinant of the performance of women owned microenterprise. However, the findings revealed that the minimum amount of loan that could be secured in some of the microfinance institutions, especially in the first cycle, was as small as TZS 25 000. Given the importance of size of credit on business performance, this study appeals to the MFIs to raise the size of credit they give in the first and subsequent loan cycles.

The study concluded that the performance of businesses of women borrowers was hampered by high interest rates offered by MFI and individual money lenders, among other things. This is because interest rates attached to microcredit products was negatively correlated with all three indicators of business performance, namely sales, net profit and

business net worth. This study recommends that MFIs should consider lowering their interest rates to a level where both the borrowers and lenders can benefit. Lower interest rates are likely to encourage more people to seek credit, and that will be an advantage to the lending institutions. Further, the study recommends that the Government of Tanzania, through the Ministry of Agriculture Cooperatives and Food Security, should wage serious campaigns to expand the outreach of Savings and Credit Cooperative Societies (SACCOS) to help the poor get financial services at relatively low interest rates. The SACCOS will particularly be useful because they will provide women owners of microenterprises with immediate locations to make their savings.

The study concluded that in order for microcredit to be useful in business performance, the repayment period has to be flexible and long enough to enable borrowers to make returns on investment before they start repayment. However, some of the MFIs demanded that borrowers pay their entire loans in such short periods of time as three months. This study calls for efforts by MFIs to introduce more flexible loans' repayment arrangements through longer periods of paying back the loan. Doing so will attract more borrowers as well as boost effective repayments.

It was concluded that long time participation in microcredit schemes does not lead to better performance of the participants' businesses. This was explained by the fact that long time borrowers ended up spending part of their profits or selling assets to repay loans with such stringent conditions as high interest rate and very short repayment schedules. This study recommends that women borrowers should seek to borrow from sources which offer loans with favourable conditions.

It was concluded that the effectiveness of microcredit in the performance of microenterprises should be determined by size of loan, interest rate, repayment period and borrower's experience in receiving similar loans. The study recommends that MFIs and other microcredit services' providers should adjust their lending conditions in a manner that will make loans more effective to women borrowers' businesses.

Further, the study concluded that participation in microcredit schemes improves household welfare of women borrowers through accumulation of assets. Based on this conclusion, the government agencies, MFIs and NGOs should scale up the outreach of microcredit services; particularly to women involved in microenterprises.

5.3 Areas Recommended for Further Studies

- i. This study adopted a cross-sectional research design whereby data were collected at one point in time. This research design may not have made it possible for the researcher to fully capture seasonal aspects of women owned microenterprises. A similar study could be conducted using longitudinal research design whereby business performance can be measured repeatedly. The anticipation of the researcher is that if the proposed study could be carefully conducted, it would give a more solid and profound base on the effect of microcredit on women owned microenterprises in Tanzania.
- ii. This study was set to only assess the contribution of microcredit on women owned businesses. Although the study emerged with evidence on how credit may affect the performance of borrowers' microenterprises, it missed out the gender comparison. A similar study could be conducted to assess whether credit and credit characteristics affected male and female owned microenterprises differently.

- iii. This study was urban biased in the sense that it was conducted in the three major cities in Tanzania, namely Dar es Salaam, Arusha and Mwanza. The results of this study, therefore, are unlikely to tell the story of the rural areas, at least, with specific details. Another study could be conducted to involve respondents (borrowers and non-borrowers) from both rural and urban settings.

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APPENDICES

Appendix 1: Questionnaire to collect information from women owners of microenterprises

Name of city _____ Name of the district _____
 Location/ward _____ Name of enumerator _____

SECTION 1: GENERAL INDIVIDUAL AND BUSINESS INFORMATION

1.1 Demographic Information

Q1 Age in nearest years _____

Q2 Level of education

- | | |
|-------------------------------------|---------------------------------------|
| (1) Never attended formal education | (2) Primary education |
| (3) Secondary education | (4) Post-secondary school certificate |
| (5) Diploma | (6) Degree or equivalent |
| (7) Postgraduate degree | |

Q3 Marital status

- (1) Single (2) Married (3) Divorced (4) Separated (5) Cohabiting (6) Widow

Q4 How many people comprise your family? _____

Q4a What are the ages (yrs) of members of your family? Complete the table below

S/N	Names of family members	Relationship to Head of Household <i>(see codes below)</i>	Sex <i>(put 1 if male and 2 if female)</i>	The person normally stays in this household <i>(put 1 if yes and 2 if no)</i>	The person stayed in this household yesterday household <i>(put 1 if yes and 2 if no)</i>	Age in nearest years
1						
2						
3						
4						
5						

CODES FOR RELATIONSHIP TO HEAD OF HOUSEHOLD

- | | | |
|---------------------|-----------------------|---------------------|
| (1) Head | (5) Grand-child | (9) Co-wife |
| (2) Wife or husband | (6) Parent | (10) Other relative |
| (3) Son or daughter | (7) Parent-in-law | (11) Not related |
| (4) Son-in-law | (8) Brother or sister | |

1.2 Business Information

Q5 Name of proprietor (owner)_____

Q6 Type of enterprise_____

- (1) Manufacturing (2) Retail (3) Service industry

Q7 Date started (Month/Year)_____/_____

Q8 Location of business

- | | | |
|------------------------------|--------------------|-------------|
| 1) Home | 2) Market | 3) Roadside |
| 4) Commercial town (in shop) | 5) Industrial area | 6) Mobile |
| 7) Other (specify) _____ | | |

SECTION 2: ACCESS TO CREDIT

Q9 Did you obtain credit to finance this business in the previous five years?

(Yes/No)

Q10 If yes; from which source, what amount and at what interest rate, grace period and repayment period?

(1) Source	(2) Date (Month/year)	(3) Amount (Tsh)	(4) Interest rate (%/annum)	(5) Grace period (in months)	(6) Repayment period (in Months)	(7) Repeated experience (1) Yes (2) No
(i) Family friend						
(ii) Money lender						
(iii) Bank						
(iv) MFI						
(v) SACCOS						
(vi) VICOBA						
(vii) Suppliers						
(viii) Other						

Q11 If you have had repeated borrowing experience, when did you start borrowing?
What amount? How many times have you borrowed? What is the current
amount that you borrowed? (Use the table below)

(1) Source	(2) How often? (frequency)	(3) Date of 1 st loan (month/year)	(4) Amount borrowed in the 1 st time)	(5) Date of last loan (month/year)	(6) Amount borrowed in the last time)
(i) Family friend					
(ii) Money lender					
(iii) Bank					
(iv) MFI					
(v) SACCOS					
(vi) VICOBA					
(vii) Suppliers					
(viii) Other					

Q12 Did you use part of the last loan to finance other household requirements other
than this business? (Yes/No)

Q12a If yes, how much of the loan did you use for other household requirements?

Q12b What was the proportion of the last loan was used to finance business?

(This information should be calculated by the researcher)

SECTION 3: INFORMATION ON BUSINESS PERFORMANCE INDICATORS

3.1 Sales Information

Q13 What are the average sales last month/week/day (including in-kind payments)?

(If sales are per day or week, calculate the aggregated sales per month)

Q14 Apart from your sales, do you consume or give away part of your output?

(Yes/No)

Q15 What is the value of the output given away or consumed last month/week/day?

(put zero if she does not consume or give anything away)

	(1) Value in Tsh	(2) How often (1) per day (2) per week (3) per month (4) per year
(i) Consumed in the HH		
(ii) Given away		

3.2 PROFIT INFORMATION

Q16 After all costs are considered (costs like transport, cost of input, supplies, paid labour etc), how much profit did you earn in this business over the past week/month without including value of payments in kind to family members or payments to yourself? _____

(If the estimate is for the last week, the researcher will find out if that week was high, low or average. Then he will derive as estimate for the amount with the proprietor that covers all weeks in that past month)

Q17 After considering all costs, how much profit did you earn in this business in the last year? *(specific for businesses older than 1 year)* _____

Q18 How much were your sales last day/week/month _____

Q18a Specific period of reference (1) Days (2) Week (3) Month _____

Q19 How much were your total expenses last week or month? _____

Q19a Specific period of reference (1) Week (2) Month _____

Q20 Considering all of your inputs material, finished goods, cash and savings for the business, debts you owe, debts owed to you, and your fixed assets; how much would you say is the value (worth) of this business today? _____

Q21 Does your family consume or use any of this business' products or services
(Yes/No)

Q21a If yes, what is the value of the products/services normally consumed or used by your household? _____

(Put zero if nothing is consumed or used by the household)

Q21b Specific period of reference

(1) Day (2) Week (3) Month (4) Half year (5) Year _____

Q22 Do you use part of the money you get from this business for yourself or your household? (Yes/No)

Q22a If yes, how much money from this business do you normally use for yourself or your household? _____

(Put zero if nothing was consumed or used by the household)

Q22b Specific period of reference

(1) Day (2) Week (3) Month (4) Half year (5) Year _____

Q23 After making purchases for your business and after using some money for yourself for your household, is there usually any money left (Yes/No)

Q23a If yes, how much money is usually left? _____

(put zero if no money is left)

Q23b Specific period of reference

(1) Day (2) Week (3) Month (4) Half year (5) Year _____

3.3 Cost Information for Traders Only (*Retail enterprises*)

(if the respondent is not a trader, skip to next section)

Q24 How much do you usually spend to restock your business in

Q24a High-sales month _____

Q24b Low-sales month _____

Q24c An average-sales month _____

Q25 What are the top five (5) products that provide you with the most receipts from sales?

Name of products	Most frequent selling price per unit		Purchasing price of the product		Number of units sold		(7) Units of sales per units of purchases (selling-purchase ratio)
	(1) Price (Tsh)	(2) Unit	(3) Price (Tsh)	(4) Unit	(5) Number of units	(6) Time period (1) Day (2) Week (3) Month	
(i)							
(ii)							
(iii)							
(iv)							
(v)							

3.4 Cost Information for Non-Traders (*Manufacturing and service enterprises*)

Q26 What were the costs of your inputs or supplies in the recent past day/week/month/year? (*if the respondent say the costs are per day, then ask if she buys the input/s or supply/ies every day*)

Name of input/supply	(1) Cost in Tsh	(2)Time period (1) Day (2) Week (3) Month (4) Year
(i)		
(ii)		
(iii)		
(iv)		
(v)		

3.5 Other Operating Costs

Q27 What were the operating costs of this business in the recent pas day/week/month/year? (*If a respondent says that the costs are per day, ask if she purchases the unit every day*)

Cost category	(1) Cost in Tsh	(2) Time period (1) Day (2) Week (3) Month (4) Year
(i) Paid labour (salaries)		
(ii) Paid labour (casual/piece workers)		
(iii) Paid labour (other if any)		
(iv) Unpaid labour (Value of in-kind payments)		
(v) Electricity for business (only for business)		
(vi) Telephone/mobile charges (Only for business)		
(vii) Transport of inputs		
(viii) Rent of shop or storage space (only if it is a separate shop/space for business)		
(ix) License		
(x) Cost of credit (interest rate for a borrower from MFIs)		
(xi) Repair/services for machines/car		
(xii) Other		
(xiii) Other		

3.6 Fixed Assets of Business

Q28 Please tell me about the following items (properties) owned and used in this enterprise.

Item (indicate the specific names of property)	(1) Years owned	(2) Years left of use	(3) Original purchasing price	(4) Price if sold today	(5) If shared with other businesses or household what % of time (per day/week/month/year) is it used by this business
(i) Tools					
(ii) Furniture or furnishing					
(iii) Vehicles					
(iv) Machinery					
(v) Building/booth					
(vi) Others					

3.7 Inventories

Q29 What is the total value of your raw materials (or supplies) if sold today? _____

Q30 What is the total value of your finished products if sold today? _____

Q31 Please indicate types of products and their respective values in your inventory.

(1) Product/raw material	(2) Number of units available	(3) Value of one unit if sold as it is today	(4) Total value
(i)			
(ii)			
(iii)			
(iv)			
(v)			
(vi)			
(vii)			
(viii)			
(ix)			
(x) Others			

3.8 Debts and Accounts Receivable

Q32 In total, how much do your customers owe you as of today? _____

Q33 How much do other traders owe you as of today? _____

Q34 How much do family, household, friends or neighbours owe you as a result of Borrowing products/commodities/services from this business as of today?

Q35 If you have received credit for this business from each of the following Sources, how much do you still owe the lenders as of today including interest?

Source of credit	Amount still owed
(i) Money lender (include also friends lending with interest)	
(ii) Bank	
(iii) MFI	
(iv) SACCOS	
(v) VICOBA	
(vi) Suppliers	
(vii) Other	

4.9 Savings

Q36 If you had an excellent opportunity to invest in this business (or other business of your interest) how much cash (resulting from this business) could you have to spend? _____

Q37 How much does your business have today? _____

Q38 What amount of savings do you have from this business?

Location of savings	Amount
(i) Bank	
(ii) MFI	
(iii) SACCOS	
(iv) VICOBA	
(v) Shopkeeper/s	
(vi) Others	

SECTION 4: HOUSEHOLD OWNERSHIP OF ASSETS

6.1 Ownership of Physical Assets

Q39 Does your household own a living house? (1) Yes (2) No

Q40 When did you acquire it? (State the exact year) _____

Q41 Did you use part of the money you borrowed to construct that house
(1) Yes (2) No

6.2 Ownership of Consumer Durables

Q42 Which of the following items do you possess? (You may tick more than one item)

S/N	Item	Year of acquisition
i	Radio	
ii	Television	
iii	DVC player	
iv	Computer	
v	Bicycle	
vi	Motorcycle	
vii	Decoder	

6.3 Ownership of Productive Assets

Q43 Which of the following producted items do you own and when did you acquire them? You may indicate more than one items

S/N	Item	Year of acquisition
i	Refrigerator	
ii	Sewing machine	
iii	Juice blender	
iv	Gas cooker	
v	Drier (in beuty salon)	
vi	Thermo flask/hot pots/food warmers	
vii	Kiosk/booth/room from which the business operates	

Appendix 2: Interview Checklist for Providers of Microcredit Services

- 1) How would you describe the mission and vision of your MFIs in Tanzania?
- 2) What are the types of services and products have you been providing to the women owners of MES?
- 3) What criteria do you use to provide women owners of MEs with loan? In your opinion do you think those criteria are fair and encouraging?
- 4) Would you please talk to me about the modality of lending, size of credit/loan, interest rates and repayment period? *(Is the size enough to really fuel the businesses of borrowers? Is the interest rate suitable? What about the repayment period?)*
- 5) In your opinion, do you think that a woman with more experience in borrowing in terms of repeated participation in the loan cycles is likely to have her business perform better than a counterpart with limited experience?
- 6) Given your experience with various microcredit products that your institution offers to women owners of Microenterprises; would you say that the loans have impacted positively on the welfare of the borrowers' households? What about that of their businesses?
- 7) What evidences do you have showing that the microcredit (loans) you have been providing to women owners of MEs have had positive impact on their businesses and households at large? *(Do you have any written report on how such loan schemes have impacted positively on the side of women owners of MEs borrowers?)*

Appendix 3: Guide Questions for Focus Group Discussion**Questions for the borrowers**

- 1) Given your experience with loan, would you say your participation in microcredit scheme was useful to your business?
- 2) What do you think about continued participation in a microcredit scheme? Is it useful or not? Does it help business grow or not?
- 3) In your views, was the loan size (amount borrowed) enough to cater for the needs of your business?
- 4) What is your opinion on the interest rates offered by the microfinance institutions that gave you loans? Would you say it affected your business? If so, in what ways?
- 5) Please, let us discuss about the durations that are allocated for the repayment of loans to the various sources from which you borrowed.
- 6) In case you have stopped borrowing from MFIs, what were the reasons for doing so?
- 7) Why did you decide to borrow from MFIs or money lenders instead of borrowing from banks?

Question for the non-borrowers

- 8) Why haven't you tried to secure loan from any source (bank or microfinance institution)?
- 9) Do you think you could also secure a loan from those institutions or any other government program?
- 10) What is your perception about the loans that women obtain from various sources?