FINANCIAL SYSTEMS AND ECONOMIC GROWTH IN SELECTED MICROFINANCE INSTITUTIONS IN RUSIZI DISTRICT, RWANDA

A Thesis

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Master of Business Administration

By:

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DECLARATION A

"This thesis is my original work and has not been presented for a Degree or any other academic award in any University or Institutional of Learning".

Emilienne MUKABATONI

Name and Signature of Candidate

October, 07th 2011

Date

DECLARATION B

"I confirm that the work reported in the thesis is carried out by the candidate under my supervision."

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Name and Signature of Supervision

7/10/11.

Date

APPROVAL SHEET

This thesis entitled "Financial Systems and Economic Growth in selected MFIs in, Rusizi District Rwanda" prepared and submitted by Emilienne MUKABATONI in partial fulfillment of the requirements for the degree of Master of Business Administration has been examined and approved by the panel on oral examination with a grade of PASSED.

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Date of Comprehensive Examination:_____

Grade _____

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DEDICATION

To my beloved husband Mr. David KUBWIMANA and my daughters Edda KUBWIMANA ISIMBI and Louela SHIMWA INEZA for their love and patience during my course of studies.

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ABSTRACT

In this study researcher investigated the relationship between effectiveness of financial systems and economic growth in selected MFIs in Rusizi District Rwanda. It was carried out with the specific objectives to determine the profile of the respondents as to age, gender, highest level of education, and professional experience, determine the level effectiviness of financial systems in selected microfinance institutions, determine, the level of economic growth, and lastly, to establish relationship between the effectiveness of financial systems and economic growth in selected MFIs in Rusizi District, Rwanda

The study was conducted though the uses of descriptive survey design and involved quantitative approach. SLOVEN's formula was also used to determine a sample size of 174 respondents from 250 targeted populations and the sampling was done by the use stratified random sampling technique. Self administered questionnaires were used as research instrument and Content validity Index was used to ensure validity and reliability of research instruments. The ensured the ethical and logistic considerations of research and both qualitative and quantitatively were used to analyze data using statistical techniques such as mean and Pearson correlation matrix.

Findings indicated that financial systems in terms of levels of loans in selected MFIS is still low with average mean of 2.43; level of economic growth in form of level of income and capital accumulation is high with average mean of 2.62. Findings also indicate positive significant relationship between financial systems and economic growth ($r = .794$, $P < .000$) at .05 level of significance.

The study concludes that there is a positive significant relationship between Effectiveness of financial systems and economic growth.

The study therefore recommends that Micro Finance umbrella organization be established and given strong support by Government and donors as a body to give guidance to the industry.

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LIST OF ACRONYMS AND ABBREVIATIONS

BNR	Banque National du Rwanda
CVI	Content Validity Index
GDP	Gross Domestic Products
EDPRS	Economic Development and Poverty Reduction Strategy
GNP	Gross National Product
MFIS	Microfinance Institutions
NISR	National Institute of Statistics of Rwanda,
PCA	Principal Component Analysis
SACCOs	Savings and Credit Cooperatives
SPSS	Statistical Packages for Socials Sciences
TFP	Total Factor Productivity
GDP	Gross Domestic Productivity
MINICOFIN	Ministry of Finance and Economic Planning

CHAPTER ONE

THE PROBLEM AND ITS SCOPE

Background of the Study

In the early independence days, Rwanda like most other countries in Sub- Saharan Africa followed the economic liberalization, privatized the financial sector to reduce financial repression, encouraged market determined prices of financial services, entry of international players and enhanced market completion.

Long-term sustainable economic growth depends on the ability to raise the rates of accumulation of physical and human capital, to use the resulting productive assets more efficiently, and to ensure the access of the whole population to these assets. Financial systems supports this investment process by mobilizing household and foreign savings for investment by firms; ensuring that these funds are allocated to the most productive use; and spreading risk and providing liquidity so that firms can operate the new capacity efficiently. Financial systems thus involve the establishment and expansion of institutions, instruments and markets that support this investment and growth process.

The main function financial system is to facilitate the transformations of saving from surplus sectors to the deficit sectors. A well functioning of financial system promotes economic growth through the quantity effect channel increasing in saving and investment and in quality effect channel in increasing in productivity.

The relationship between financial systems and economic growth has been the subject of increasing attention over recent years since the studies of Bagehot (1873) and Schumpeter (1912). The majority of this attention has been on its empirical aspect. It is well recognized that

financial systems is crucial for economic growth. Furthermore, the direction of causality between financial systems and economic growth has significantly different implications for development policy. The supply leading view supports a positive impact of financial systems on economic growth Schumpeter (1911); Gurley and Shaw (1955). Financial systems cause economic growth by allocating resources to more productive sectors. Patrick (1966) explains this view as follows: to transfer resources from the traditional, low growth sectors to the modern, high growth sectors and stimulate an entrepreneurial response in these modern sectors.

For instance, microfinance Institutions (MFIs) directly contribute to economic growth through value created of small Entrepreneurship and businesses, positive spillovers, improvements in human development indicators (health, nutrition, and education), reduction in inequality and poverty Ravallion (2001). Microfinance was incorporated as government policy that guarantee loans to the small, medium and micro-entrepreneurs for rising and financing their investment and consumption. The loans provided increase the income that is the important element of standard of life and mobilize the saving. Lack of liquidity of fund is one of the big problem for entrepreneurs, who want to set up small scale business. Therefore the loans provided , and capital accumulation help them to increase their income through saving, consumption and investment hence economic growth.

Microfinance plays a crucial role in the Rwandan economy, and more broadly in society as a whole. That role has been recognized and prioritized in Government of Rwanda's medium term Economic Development and Poverty Reduction Strategy (EDPRS). It is now clearly understood that microfinance institutions (MFIs) do not merely help recipients of loans; rather, they have systemic impacts that benefit a broad segment of Rwandan society Murgatroyd et al, (2007).

Microfinance is a model which seeks to provide financial services to the rural population in a viable and sustainable manner. Microfinance encompasses the provision of a broad range of services such as deposits, loans, payment services, money transfers and insurance products to poor and low-income households and micro enterprises. Microfinance allows replacement of high-cost debt from informal sources, thereby increasing disposable income.

For this purpose, out of several indicators of financial systems, are loans which are seems most appropriate since they have been used widely as a prime indicator of financial development and data for it are relatively more plentiful; Capital accumulation and income which are most appropriate to economic growth.

In this regard, researcher investigated relationship between financial systems and economic growth through the level of loans as independent variable and the level of income and capital accumulation as dependent variable.

Statement of the Problem

Achieving balanced and inclusive economic growth is a key challenge faced by policymakers in countries around the world. The gains of economic growth are accessible to a greater extent by the relatively advantaged, who find it easier to participate in the growth process. Majority of people have no access to financial services despite increased government programmes like setting up microfinance institutions. Access to financial services is a key element of the process of socio-economic empowerment hence economic growth. Poorer people, who are separated by distance from the urban areas where economic activities are

concentrated, have to wait much longer to reap the benefits of economic growth.

As Karima and Holden (2001) noted, improved financial services provide the poor an opportunity to improve their livelihoods and, alongside with social services, can contribute to poverty reduction. The financial services needed do not cover micro credit alone, but also other services are in demand. These include above all savings, but also money transfer services, micro insurance and micro leasing, all of which can play an important role in the economic empowerment of the poor.

It is therefore within this background that this study attempted to investigate the relationship between financial systems and economic growth in Rwanda.

Purpose of the Study

The purpose of this study was to determine the relationship between financial systems and economic growth in selected MFIs in Rusizi District, Rwanda through the determination of level effectiveness of financial systems in MFIS in terms of loan schemes, determination of level of economic growth in terms level of income and the level of capital accumulation.

General Objective

To determine the relationship between the financial systems and economic growth in selected MFIs in Rusizi District, Rwanda.

Specific Objectives

This study was based on the following research objectives:

(i) To determine the profile of respondents as regards to: gender, age groups, education level, level of experience with or in financial institutions and marital status

(ii) To determine the extent of financial systems in selected microfinance institutions in Rusizi District, Rwanda.

(iii) To determine the level of economic growth in Rwanda.

(iv) To establish the relationship between extent of financial systems and the level of economic growth.

Research Questions

This study sought to answer the following research questions:

(i) What is the profile of respondents as to: gender, age group, education level, experience with or in the financial institutions and marital status?

(ii) What is the extent of financial systems in selected microfinance institutions in Rusizi District, Rwanda?

(iii) What is the level of economic growth in Rwanda?

(iv) What is the significant relationship between extent of financial systems and the economic Growth?

Research Hypotheses

Ho-There is no significant relationship between extent of in financial systems and level of economic growth.

Scope of the Study

Content Scope

This study examined the relationship between extent of financial systems and economic growth of Rwanda in selected MFIs. In so doing, the study investigated the level of effectiveness of financial systems in terms of level of loans in promoting economic growth ; level of economic growth in terms of income ; the level of effectiveness of financial systems in terms

of level of capital accumulation in promoting economic in terms of level of income ; a significance relationship between effectiveness of financial systems in terms of level of loans and economic growth in terms of level of income; and lastly investigated a significance relationship between effectiveness of financial systems in terms of level of capital accumulation and economic growth in terms of level of income.

Theoretical Scope

This study was guided by supply –leading theory by early economist Schumpeter (1911). The proponents of this theory believe that the activities of the financial institutions serve as a useful tool for increasing the productive capacity of the economy. The theory also asserted that countries with better developed financial systems tend to grow faster meaning that there is causal relationship between financial systems and economic growth.

According to an economic theory; empirical findings show that the well functioning and well organized financial sector is necessary for the long run economic growth. Schumpeter (1911) argued that financial intermediation through the banking channel played a crucial role in economic activity and accelerate the saving and improve the productivity. Since the variables for this study was financial systems in terms of loans and economic growth in terms of income and capital accumulation, it is therefore appropriate theoretical framework for this study.

Geographical Scope

Regarding the geographical scope, this study was carried out in some two selected microfinance institutions that acted as the representation for financial systems in Rwanda. These selected microfinance institutions included Rim ltd and *Umwalimu* SACCO all operated in RUSIZI DISTRICT, Rwanda.

Time scope of the study

This study period was between 2006-2010. Researcher started with the work of choosing a topic and its approval and then writing of research proposal from the month of May 2011 up to the month of September 2011. Literature review was then done in June and in the same month, decision on which data collection method would be used was done. In July 2011, data collection in the field was done and coding started towards the end of the same month. In August 2011, data was analyzed and followed by editing of the work .In September, the researcher submitted the final work for approval hence making it ready for defense.

Significance of the Study

The study will contribute knowledge to the academic world on the relationship between effectiveness of financial systems and economic growth in selected microfinance institutions. The findings of the study showed how effectiveness of financial systems through the level of loans offered by microfinance institutions promoted economic growth through the level of income and capital accumulation. The research could be used as a reference to other researchers interested in the field. It will also be helpful for the researcher to be equipped with knowledge of how to deal with problems by use of research findings.

This research will create awareness on the effect of well functioning of financial systems in promoting economic growth through the loans held by clients of Microfinance institutions for promoting economic growth through the public income and capital accumulation.

The study was benefit to the clients of selected Microfinance institutions in Rusizi district in understanding the conditions under which financial

systems facilitate saving mobilization, in handling with the risk management, facilitate exchange of goods and services, and lastly promote and monitoring the borrowers in within an institution. This is benefit to the government through the increase of individual income, investment and consumption. This will be also benefit to the selected Microfinance institutions to gain more clients through the marketing of theirs services offered and sensitization about the facilities of getting credit in their institutions.

Operational Definitions of Key Terms

For the purpose of this study, the following terms are defined as they are used in the study:

Effectiveness in this study means consistence, integrity and competence and reliability in handling micro saving and loans to the local people as a strategy of empowering them both socially and economically to the extent of meeting its core objectives and goals.

Finance system is a system that facilitates the transfer of the funds from the surplus units to the deficit units.

Financial services all types of activities which are financial nature could be brought under the term financial services.

Microfinance is an economic development approach that involves providing financial services, through institutions, to low-income clients, where the market fails to provide appropriate services. The services provided by the Microfinance Institutions (MFIs) include credit saving and insurance services. Many microfinance institutions also provide social intermediation services such as training and education, organizational support, health and skills in line with their development objectives.

The loan is a type of debt like all debt instruments; a loan entails the redistribution of financial assets over time, between the lender and the borrower. In a loan, the borrower initially receives or borrows an

amount of money, called the principal, from the lender, and is obligated to pay back or repay an equal amount of money to the lender at a later time.

Capital accumulation: Capital accumulation increases the amount of machinery, equipment, and structures available to workers in the economy, thus raising their productivity. Moreover, new capital often embodies technological progress. Hence capital accumulation can be viewed as the most direct way of raising the standard of living.

Income: Refers to the accumulations of both monetary and non-monetary consumption ability. Individual income is expressed in monetary terms such as, sum of all the wages, salaries, profits, interests, payments, rents, and another forms of earnings received in a given period. For the firm, income is net profit what remains of revenue after expenses have been subtracted. In this study, income is defined as for public income.

Micro finance Institutions (MFIs) is part of the non formal banking industry or non-governmental organization engaged in extending micro credit loans and other financial services to poor borrowers for income generating and self employment activities besides offering micro credit services.

Economic growth refers to the increase (or growth) of a specific measure such as real national income, gross domestic product, or per capita income. Different indicators in here are measured in terms of income level, level to access health services, access to education, level of employment opportunities, level of women's empowerment formed basis under economic growth in this research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Concepts, Ideas, Opinions from Experts / Authors

In this chapter, analysis of the literature related to the subject of the study with the objectives in light of experts and authors is articulated. This is done in respect to the study variables. The literature is reviewed under the sub-themes which synchronize with the research objectives or questions or hypothesis.

The extent of financial systems in terms of loans

Different investigations on the microfinance loan schemes have been carried out. Studies by Stuart (2000) for example indicated that microfinance institutions (MFIs) have since mid 1990s gained a wider recognition for the role they play in providing financial services to the low income people and their contribution to poverty alleviation. According to this study, this recognition is evidenced by the rapid advances by the government, donors and other practitioners in developing and implementing programs that support microfinance initiatives in Rwanda, as well as the dramatic expansion of the microfinance industry.

Stuart (2000) also indicated that over the last five years, microfinance institutions have picked up form in many countries of the World Bank (2007). It is estimated that thirteen million (13,000,000) people around the world are being helped by the loans from more than 7000 microfinance institutions (MFIs) with over 7 billion in total loans and

the loan repaid rate is very impressive at 97%. This therefore means that the level of loan schemes has tremendously improved all over the world.

Further studies carried out on the level of loan scheme in the case of microfinance especially in Africa also indicated that currently there are over three thousand MFIs being accessed by the low income people especially the rural poor UNDP (2004). These institutions are said to have made tremendous successes in reducing poverty levels in Africa lending and financing different activities. Additional studies also noted that MFIs normally help low income people by availing them with affordable financial services. MFIs therefore have been identified locally, nationally and internationally as a mechanism through which the poor who are largely based in rural areas can use to run away from the hands of poverty UN report (2003).

It has also been noted that MFIs provide financial services to the poor people who have experienced difficulties in obtaining these services from most formal financial institutions because their business level and credit needs are all small UNDP (2003). In many countries of the world especially in developing countries, the poor are mostly found in the rural areas, no wonder the rapid concentration of MFIs in the rural areas.

MFIs help to avail the poor with small scale loans that would introduce them to small enterprise sector K. Annan (2003). This could allow them to be more self-reliant, create employment opportunities and help to engage the rural poor woman in economically productive work which helps to improve their standards of living. UN report (2003) reveals that over two million entrepreneurs help themselves out of poverty through micro finance loans in every five years.

MFIs enable people to access a wide pool of stable low cost funding which can reduce dependency on external funding sources and present an opportunity to become self reliant through the expansion of their businesses World Bank (2003. These institutions have been seen as to be

playing a key role of promoting growth as well as eradicating poverty in the rural areas through provision of loans and financing productive assets.

MFIs play a crucial role of responding to the real needs of their clients who in most cases are the rural people who may not have collateral or well written feasibility studies to solicit from loans from the formal financial institutions like the commercial banks.

One of the most intractable economic problems for poor countries has been the high price or outright unavailability of credit in rural communities. Primarily because of weak institutional infrastructure in rural areas, formal sector banks have faced seemingly insuperable information asymmetries and consequently have experienced persistently high costs and default rates. Screening potential borrowers, monitoring borrower behavior after loans are granted, and enforcing credit agreements are all extraordinarily costly where documented credit histories do not exist, businesses are very small, and legal systems are undeveloped, unreliable, or inaccessible. Further still, few concepts that have succeeded in expanding the availability of credit in poor, rural communities has been microfinance, a practice that involves the provision of small loans to borrowers without conventional collateral. The term of the loans is short usually less than two years, and the microfinance institution (MFI) normally requires that the loan proceeds be used for investment in productive capital for example, in agriculture, trading, crafts, or processing industries rather than consumption Bornstein (1996).

First, individual loans used to finance short term working capital requirements of existing businesses, most often in urban or semi-urban retail and mercantile sectors, and, second, group loans to support the income generating activities of men and women in the lower income categories of Rwandan society.

Studies on the typical structure of a microloan noted that typically a few dollars to less than two hundred dollars, involves the creation of a

loan committee composed of trusted members (usually elders) of a village or community. The loan committee then makes loans to groups of four or five borrowers who are known to each other (some program prohibit relatives from belonging to the same borrowing group) who then decide among themselves who will get the first tranche of loans. These 'solidarity groups' meet weekly to discuss their businesses, problems, and family issues, all of which impact the ability of the member to repay on time. Such extreme relationship management practices are designed to build trust, compound social capital, and strengthen network ties among the borrowers and the micro finance institution or MFI. In the early days of the Grameen Bank, founded by Dr. Mohammed Yunus in Bangladesh, for example, bank officers found it difficult to give out loans because of suspicion among villagers, and experienced push back from the village chettiars (moneylenders) that viewed the Bank as competition. Bank officers resorted to social work to first build trust before promulgating their loan program Hassan (2002).

Servicing microloans or monitoring the provision of grants is economically infeasible for traditional financial institutions and government because of the costs of identifying, delivering, and monitoring micro-credit to communities who are not already part of the market economy Tsai (2004). However, MFIs have given loans to solidarity groups of five people, using the opportunity for everyone in the group to secure future credit as collateral, with peer pressure as an additional incentive to ensure repayment. By charging market interest rates (or higher than market interest rates), these institutions are able to cover their administrative costs while enjoying repayment rates significantly higher than that of the traditional commercial banks Nair(2001).

Level of Economic Growth

Economic Growth in terms of Income Level

Income is one indicator of social and gender impact, but when presented in aggregate form, it also has serious limitations. Nor should income be seen as the only measure of poverty reduction and gender equity. Equally important are indicators that demonstrate impact on the vulnerability of the poor income has often been confused with cash flow.

An income-generating activity may produce more cash, but associated costs may also be high. Especially because micro entrepreneurs often mix business and family finances, certain costs may remain hidden; leaving an impression that income has increased more than it actually has MacIsaac, (1996). Furthermore, seldom factored in are the respective opportunities cost and return on labor for both women and men in the household. In some cases, women may be increasing their workload significantly in exchange for marginal increases in income. The greater the income increases derived from credit.

The aim of MFIs generally is to increase the income of the target group or some similar income-denominated objective. Implicit in this is that increased income results in a reduction in poverty. On a simple, money-determined level, if increased income is simply spent in the cinema or at the tea-stall or on alcohol, there is no increase in wealth and no reduction in poverty. In addition, in the words of Sharif (1997), Poverty is not only about having inadequate income or income below the poverty line, but is also about the inability to sustain a specified level of well-being. An income is usually associated with seeing poverty-reduction as a process of moving households from a stable below poverty line situation to a stable above poverty line situation. This leads to strategies aimed at raising persistently low incomes (Dreze at. al., 1989). In the context MFIS offer the financial services that emphasize on the provision of credit for

income-generation through self-employment. A broader, less linear, view of poverty sees income levels as fluctuating below and above the poverty line.

Here is a clear statement of the case for Microfinance programmes to provide a variety of financial services tailored to the specific needs of the clients (be they extreme, moderate or not-so-poor). The financial services should allow clients to manage their household income and expenditures more effectively. To do this, the financial services should provide options both to minimize shocks (arising from illness or death in the household, crop failure, theft of key assets, dramatic price fluctuations, the payment of dowry etc.), and to invest in income generation activities with risk levels appropriate to the household's basic needs security. In short they should offer a range of both savings and credit facilities. Credit schemes give borrowers an important one step up in income, however, survival skills rarely provide the technological or entrepreneurial basis for poor borrowers to move on to the escalator of sustained growth of income.

The term economic growth refers to the increase (or growth) of a specific measure such as real national income, gross domestic product, or per capita income. National income or product is commonly expressed in terms of a measure of the aggregate value added output of the domestic economy called gross domestic product, GDP. In other words, GDP is a measure of the value of all of the goods and services produced in a country in a year. GDP can be calculated as the value of the output produced either in a country or equivalently as the total income, in the form of wages, rents, interests, and profits, earned in a country. Thus, GDP is also known as output or national income. However, according to Arestis and Demetriades (1995) many aspects of economic well-being are not measured by GDP, there are serious conceptual and practical

problems in measuring, and comparing GDP remains a rough and ready measure of standard of living.

The extent of income inequality has been widely documented in the literature. According to the 2005 Human Development Report, 2.5 billion people, or 40% of the world's population, live on less than $2 per day, and their combined income equals only 5% of global income; looking at the other extreme, the income of the richest 10% of the global population accounts for 54% of global income. Furthermore, the 500 richest people in the world have an aggregate income greater than that of the poorest 416 million individuals Human Development Report (2005). Based on these statistics, there is no doubt that worldwide income inequality is quite severe, but many would argue that such inequities are inherent in a capitalist system and that despite the inequality, there is no need to pursue policies to correct the imbalance.

Conversely, Li, Squire, and Zou find that income inequality within countries remains relatively stable, though income inequality across countries varies widely. Specifically, as the income distribution within a village becomes increasingly unequal, those at the top of the distribution have greater access to resources than those at the bottom. This can lead to distributional struggles, and even violence, as those at the bottom of the distribution oppose non-inclusive growth.

In various studies being carries in the globe, microfinance services are said to have contributed directly to reducing extreme poverty by improving the income of poor people hence improving their welfare. In a study conducted in Lombok, Indonesia, Otero, M. and Rhyne, E. (1994) for example reveal that those clients of Bank Rakyat Indonesia's (BRI) incomes increased by 112%. Moreover, this increase was enough to move 90% of these families above the poverty line. In the study conducted with 121 respondents, 12 out of 121 respondents are said to have been the

only ones reporting that their income did not increase, because their husbands used the money for other purposes.

Otero, M. and Rhyne, E. (1994) with the use of Poverty Assessment Tool (PAT), found out that, in India, three-fourths of the Microfinance Institution (MFI) clients saw significant economic improvements and half the clients got out of poverty. This was similar to the results declared by the World Bank in 1998, where if found out that the poorest 48% of Bangladeshi families with access to micro credit from Grameen Bank rose above the poverty line.

In People's Republic of China (PRC), microfinance programs are reported to have helped a lot in lifting 150 million people out of poverty since 1990 (UNHDR, 2005). Moreover, in Ghana, MkNelly and Dunford (1998) found that clients increased their income by $36, compared with $18 for non-clients. Clients of microfinance generally are said to have shifted from irregular, low-paid daily jobs to more secured employment in India and Bangladesh Hilhorst, Th., and H. Oppenoorth (1992). Correspondingly, Filipino households are said to have increased income, consumption, and capital Phelps (1995).

Economic Growth in terms of Capital Accumulation

The accumulation of capital refers to the gathering or amassment of objects of value; the increase in wealth through concentration; or the creation of wealth. Capital is money or a financial asset invested for the purpose of making more money (whether in the form of profit, rent, interest, royalties, capital gain or some other kind of return). This activity forms the basis of the economic system of capitalism, where economic activity is structured around the accumulation of capital.

Over the past several decades microfinance credit targeted toward small-scale entrepreneurial activities of the poor who may otherwise lack

access to financing has become a pillar of economic development policies. In recent years, there has been a concerted effort to expand such programs with the goal of alleviating poverty and promoting development. Banerjee et al. (2009)

At the beginning of each period, an individual with entrepreneurial idea z and wealth a person chooses whether to work for a wage w or operate a business. An entrepreneur with talent z produces using capital (k) and labor (l) according to:

$zf(K,L) = k^{\alpha} l^{\emptyset}$ where α and θ are the elasticities of output with respect to capital and labor, and α+θ < 1, implying diminishing returns to scale in variable factors at the establishment level. Given factor prices w and R (rental rate of capital), the profit of an entrepreneur is:

$\pi(k,l,R,w) = zk^{\sigma}l^{\theta} - Rk - wl$

Microfinance model may be incorporated as an innovation in financial technology that guarantee individuals' access and repayment of additional capital input. While the total capital limit will depend on the individuals' assets, this additional capital is independent of wealth and talent. To be more specific, we incorporate microfinance by relaxing individuals' capital rental limit into the following constraint:

$k \leq max\{k[a,z,\theta], a + b^{MF}\}$

Where b^{MF} denotes the intra-period borrowing limit of (i.e., the additional capital provided by) the microfinance innovation. Note that an entrepreneur chooses either to rent from the financial intermediary subject to the endogenous rental limit k (a, z; φ) or to use micro financing to top up his self-financed capital $a + b^{MF}$.

Our modeling of microfinance can be interpreted as a technological innovation that enables financial intermediaries to receive full repayment on small uncollateralized loans. Alternatively, microfinance can be thought of as a government policy that guarantees loans for small firms, such as

that of the US Small Business Administration. Either way, we are abstracting from the cost associated with operating microfinance institutions or the cost incurred by defaulters.

Individuals maximize (1) by choosing sequences of consumption, financial wealth, occupations, and capital/labor inputs if they choose to be entrepreneurs, subject to a sequence of period budget constraints and rental limits.

At the beginning of a period, an individual's state is summarized by his wealth a and vector of talent z. He then chooses whether to be a worker or to be an entrepreneur for the period. The value for him at this stage, v (a, z), is the maximum over the value of being a worker, $v^W(a,z)$, and the value of being an entrepreneur, $v^E(a,z)$:

$$v(a,z) = max\{v^W(a,z); v^E(a,z)\}$$

Note that the value of being a worker $v^W(a,z)$ depends on his assets and on his entrepreneurial ideas z, which may be implemented at a later date. We denote the optimal occupation choice by: $o(a,z) \in \{W,E\}$.

As a worker, an individual chooses consumption c and the next period's assets to maximize his continuation value subject to the period budget constraint:

$$v^W(a,z) = max_{c,a'} \cup(c) + \beta\{\gamma \cup(a',z) + (1-\gamma)Ez'[v(a';z')]\}$$

Where w is his labor income. The continuation value is a function of the end-of-period state (a′, z′), where z′ = z with probability γ and z′ ~ μ (z′) with probability 1 − γ. In the next period, he will face an occupational choice again, and the function v (a, z) appears in the continuation value.

Alternatively, individuals can choose to become an entrepreneur. The value function of being an entrepreneur is as follows.

$$v^E(a,z) = max_{c,a'} \cup(c) + \beta\{\gamma \cup(a',z) + (1-\gamma)Ez'[v(a';z')]\}$$

Relationship between the extent of Financial Systems and the level of economic growth

In essence, economic growth depends on the accumulation of input factors in the production process and technical progress. Traditionally, finance has been linked primarily with the first of these sources of growth, regarding capital as an important input factor and its accumulation as a condition for sustainable economic growth. Furthermore, finance contributes to the realization of technical progress to the extent that technical advances need to be embedded in the capital stock to influence production. In particular, in periods of rapid technical progress, an efficiently structured financial sector appears to be required in order to facilitate embedding technical advances in capital formation and allowing countries to benefit from this development in terms of higher rates of economic growth. Growth theory assumes that the interest rate plays the main role in equilibrating an economy's savings and investment. According to the neo-classical Golden Rule, the optimal growth path is equal to the real interest rate. For a long time, the design of the financial sector was thought to be of no major importance for economic decision making because in the presence of perfect markets, the financial sector produces nothing but a veil on the true determinants of economic developments

Driscoll (2004) proposed the mode to derive a testable equation linking bank loans and output. The starting point is a simple aggregate demand Keynesian model augmented with two equations for the demand and supply of loans.

Assume that the economy is composed of M states, i = 1;.. M, sharing a common monetary policy and currency. The portfolio choice of each investor is between bank deposits and bonds. While bonds bear the same interest rate r across states, the interest rate on bank deposits, r^d, can vary from one member state to another.

Assuming that the common monetary authority, although able to change the aggregate quantity of money cannot target the quantity of money in a specific c state *i* in line with classical Keynesian models, for each state the equilibrium money demand and supply equation can be written as follows:

$$m_{it} - p_{it} = \lambda y_{it} - \left(r_t - r_{it}^{d}\right) + \varepsilon_{it}$$

(1)

Where m_{it}-p_{it} denotes real money balances, yi_t the real income and $\dot{\varepsilon}_{it}$ he state- specific shock to money demand. In Keynesian-type frameworks, real income is equal to expenditure, which can be dis-aggregated into consumption, investment, net exports and government spending. Assuming that net exports depend on the exogenous exchange rate and government spending is given, investments and consumption will (inversely) depend on the interest rates on bonds and loans, r_t and ρ_{it} respectively. Note that the interest rate on loans can vary across countries. In equilibrium, the following equation holds:

$$y_t = \vartheta r_t - \alpha \rho_{it} + z_{it}$$

(2)

Where z_{it} denotes state-specific shocks to aggregate demand. Credit is supplied by the banking system and is a function of the interest rate on bonds and loans (that compose the asset side of the balance sheet), as well as real money balances, since deposits are considered an imperfect substitute in the financing sources available for banks. The relevant equation for loans' supply can be written as follows:

$$l_{it}^{s} = \lambda r_{it} - \mu \rho_{it} + \beta\left(m_{it} - \rho_{it}\right) + w_{it}$$

(3)

Where wi_t denotes state-specific shocks to loan supply. Similarly, the loan demand depends on real income and the interest rate on bonds, which corporations can issue to finance their activities, and inversely on interest

rates on loans. Therefore the demand for loans takes on the following functional form:

$$l_{it}^{d} = T r_t - X \rho_{it} + w y_{it} + v_t$$

(4)

Where v_{it} denotes state-specific shocks to loan demand. Since the ultimate goal of the model is to obtain a framework which allows to test for the lending channel, it is important to isolate the effects that money demand shocks have on loans (an increase in deposits increases the funding sources of the banks which can then grant more loans) and, in turn, the impact that loans have on real income. To this end, it is crucial to distinguish between the banking lending channel from the interest rate channel. To solve this identification problem, Driscoll (2004) suggests to de-mean each relevant variable x_{it} with its cross-sectional mean:

$$\tilde{x}_{it} \equiv x_{it} - M^{-1} \sum_{i=1}^{M} x_{it}$$

The system of equations (1)-(4) can then be re-written as follows:

$$\tilde{m}_{it} - \rho_{it} = \chi \tilde{y}_{it} + \delta \tilde{y}_{it} + \varepsilon_{it}$$

(5)

$$\tilde{y}_{it} = -\alpha \tilde{\rho}_{it} + z_{it}$$

(6)

$$l_{it}^{s} = \mu \tilde{\rho}_{it} + \beta\left(\tilde{m}_{it} - \tilde{\rho}_{it}\right) + w_{it}$$

(7)

$$l_{it}^{d} = -X \tilde{\rho}_{it} + w \tilde{y}_{it} + v_{it}$$

(8)

The demeaning permits to remove the liquidity preference channel together with the possible impacts that changes in monetary policy can

have via bond yields. How- ever, the endogeneity between money demand and output is not yet eliminated, since the former can be affected by expected future changes in output, and, at the same time, money demand can have an impact on output via its effect on bank lending rates. The endogeneity can easily be seen solving equations (5)-(8) for real income and loans.

However, assuming that $Corr(\varepsilon_{it}; v_{it}) = Corr(\varepsilon_{it}; Z_{it}) = 0$ solves the endogeneity between money demand shocks and real income. The assumption is plausible, since money demand shocks can depend on factors different from real income (and loan demand) such as institutional frameworks and/or preferences. Furthermore, since the country-specific shocks ε_{it} are correlated with loans but not with output, they can be used as instruments to estimate the relation between real income and loans. Ultimately, instrumenting loans with money demand shocks allows to test whether changes in the supply of loans depend on changes in deposits, i.e. an important source of funding for the banking system, and, next, the impact of loans on real output.

Similarly to bank loans, credit standards are endogenous to GDP growth. Since credit availability depends on lenders. For instance, credit standards tighten; this can generate a decrease in the credit-based level of activity of companies and households and ultimately a GDP contraction. At the same time, loan officers change their credit standards according to their expectations on real GPD growth. For instance, during business cycle downturns, banks are typically more cautious in granting credit, as collateral values and firms' net worth deteriorate, and may decide to tighten credit standards. Therefore, to identify unambiguously the impact of changes in credit standards to GDP variations, when regressing GDP growth on loan growth and changes in credit standards, also this latter explanatory variable has to be instrumented. For loan growth, similarly to

the original Driscoll's (2004) model, money demand shocks are the relevant instruments used in the empirical analysis. The information variables that are employed for credit standards are those factors affecting them but with limited or no dependence on GDP growth.

Considering the consolidated financial position of MFIs, total assets increased by 20% from December 31st, 2008 to September 30th, 2009 while equity has increased by 28.8%. This situation is coupled with an increase of gross loans and deposits by 16.4% and 18.8 %, respectively. Cash and equivalent increased by 64.3% between the two periods. The increase in cash and equivalent is mainly due to the increase in deposits of 18.8% while gross loans increased only by 16.4%. The loan portfolio has deteriorated with an increasing delinquency rate moving from 5% at the end of December 2008 to 8.4% at the end of September 2009 MINICOFIN (2010).

Capital accumulation has always been regarded as the engine of economic development.

Karl Marx has elaborated the relationship between income distribution and capital accumulation (and investment structure as well) systematically in his famous On Capital. According to the series theories of Marx (1975), such as distribution theory, reproduction theory, and two-sector equilibrium model, the distribution mode in capitalism society would certainly increase the ratio of accumulation and decrease the share of labor income. With the accumulation of capital, the production capacity expands, while the labor income share decreases, which leads to the insufficiency of consumption. The above two relationships form the basic contradiction of capitalism society, which may cause economic crisis. Although Marx was intended to illustrate the essence of reproduction and distribution in capitalism society, it still can be regarded as one of the earliest important researches on the relationship between income

distribution and capital accumulation. It implies a mechanism of "income distribution mode→income level→consumption and accumulation ratio".

During the middle of last century, some classical theories of development economics also related capital accumulation to income distribution. Arthur. Lewis, Simon. Kuznets and Rostow are among the pioneers.

Lewis' dual economy model Lewis 1955 (1989) was built under the framework of classical economics. It presumes that Supply creates demand, and thus neglects the situation of insufficient effective demand. Under the circumstance of unlimited labor supply, the income level of workers (in both subsistence sector and modern sector) is only to maintain subsistence or just a bit higher. And their consumption would mainly be primary products, not the consumption goods from modern sector. As for the capitalists, their consumption would also be limited because they were eager to accumulate as much as possible. As a result, the production of modern sector would mainly be used to meet the investment demand, and the production structure would favor the capital goods. Eventually, the sector structure and macro-investment structure would also favor the heavy industries. The Lewis dual economy model also implies the transmission mechanism of "distribution mode→income level→aggregate demand and aggregate supply→capital accumulation and macro-investment structure".

Kuznets (1955, 1989), Rostow (2001) studied the effects of income distribution on capital accumulation and investment structure in different stages of economic development. Kuznets advanced the famous "Inverse U theory" in his celebrated article "Economic Growth and Income Inequality" in the year 1955. According to his theory, income inequality would increase in the early stage of economic development. After reaching a climax, the income inequality would move towards equality. Later, Kuznets (1989) did a lot of empirical study on the characteristics of

economic growth and economic structure for different countries. It comes out that economic growth is usually accompanied with frequent change of aggregate production, which reflects the change of demand structure. While the change of demand structure can be caused by the improvement of average output (or income level) to a great extent. Kuznets did not mention the effects of income distribution (including income level and income disparity) on capital accumulation and macro-investment structure explicitly, but the above two researches also implied a mechanism of "economic development→change of income level and income disparity→change of demand structure→change of production source".

Rostow (2001) divides the social development into five stages. The supply of capital in the stage of take-off is usually obtained from the control of income flows. Actually, Rostow regard the economic development as the result of income transferring, which means the transferring of income from those not using for producing to those having such purpose. Rostow's opinion is intrinsically consistent with what implied in Lewis' dual structure model.

Wang Tongsan et al. (2003, 2004) points out some of the problems in China's economic structure, including the high investment rate, macro-economic structure favoring heavy industries and the expansion of income disparity. Wang Tongsan et al. (2003, 2004) argued that the structural problems should be solved by income distribution (policies.

According to the former analysis on several related theory, we may summarize the influencing mechanism by which income distribution affects capital accumulation and macro-investment structure as follows: (1) The change of income level and income disparity would affect the aggregate consumption and the consumption structure as well. (2) The change of consumption demands means the change of consumption and investment ratio, which would change the investment (or accumulation) level in next period; (3) The change of consumption structure would affect

the sector structure of macro-investment by inducing the change of supply; (4) In an two-sector economy composed of only consumption and investment, the change of consumption will not only affect the investment rate, but also determine the investment structure indirectly. In the simple equilibrium equation Y=C+I, the decrease of C would cause the investment demand in consumable sector (or light industries) to decrease. Then, the investment share for capital goods (or heavy industries) would increase, which may lead to macro-investment structure favoring heavy industries.

The income distribution includes income level and income disparity. The "China Statistical yearbooks" provides two series, "Per Capital Annual Disposable Income of City Households" and "Per Capital Annual net Income of Rural Households", which we choose to represent the income level. The meaning of income disparity includes not only the disparity between rural and urban areas, but also the disparity inside rural and urban areas. We will use the ratio of "Per Capital Annual Disposable Income of City Households" to "Per Capital Annual net Income of Rural Households" as the income disparity between rural and urban areas. As for the income disparity inside the two areas, we will directly use their Gini Coefficients.

The concepts of capital accumulation and macro-investment can be treated as the same thing theoretically. In the China Statistical yearbooks, they seem to be corresponded with two related series, the Gross Capital Formation and Total Investment in Fixed Assets.

Theoretical Perspectives

The presented theory of financial structure argued that there is a long run association between financial system and economic growth. These theories are bank based financial system; market based financial

system, financial service and the law and finance, supply-leading theory, demand leading theory, and bi-direction theory. For this regard researcher investigated the Supply leading phenomena.

The proponents of this supply leading hypothesis believe that the activities of the financial institutions serve as a useful tool for increasing the productive capacity of the economy. They opine that countries with better developed financial system tend to grow faster. As previously stated, early economists like Schumpeter (1911) have strongly supported the view of finance led causal relationship between financial systems and economic growth.

Financial services are necessary for the advancement of economic growth as they improve productivity by encouraging technological innovation, capital accumulation and help to identify entrepreneurs who have the best chance of success in innovation process.

The financial systems would also facilitate the mobilization of productive savings, efficient resources allocation, reducing problems of information asymmetry and better risk management; all these elements can probably create a favorable macro- economic frame to strong economic growth

Subsequently, several researchers have supported the findings. According to Mckinnon (1973), a farmer could provide his own savings to increase slightly the commercial fertilizer that he is now using and the return on the marginal new investment could be calculated. However, there is a virtual impossibility of a poor farmers' financing from his current savings, the total amount needed for investment in order to adopt the new technology. As such access to finance is likely to be necessary over the one or two years when the change takes place he concluded.

Going through the literature in more detail, the seminal study conducted by King and Levine (1993) on seventy seven countries made up of developed and developing economies used cross-country growth regression. The aim of the research was to find out whether higher levels

of financial development are significantly and robustly correlated with faster current and future rates of economic growth, physical capital accumulation and economic efficiency improvements. The result showed that finance not only follows growth; finance seems important to lead economic growth. This further buttressed the assertion that financial services stimulate economic growth.

Greenwood and Jovanovic (1990) also observed that financial institutions produce better information, improve resource allocation (through financing firms with the best technology) and thereby induce growth. Several research works on finance and growth support a positive correlation between the two variables while causality emanates from finance to growth.

Following the line of argument of the previous researchers was Gross (2001) who used two growth models to examine the impact of financial intermediation on economic growth. He stated that economic growth is no longer believed to happen for exogenous reasons; instead governments through appropriate policies particularly with regard to financial market can influence it. The recent work of Demirguc-Kunt & Levine (2008) in a theoretical review of the various analytical methods used in finance literature, found strong evidence that financial development is important for growth. To them, it is crucial to motivate policymakers to prioritise financial sector policies and devote attention to policy determinants of financial development as a mechanism for promoting growth.

The study conducted by Diego (2003) used panel estimation technique to assess the mechanisms through which policy changes have influenced the growth performance of fifteen European Union economies also supports the above postulations.

The result is in agreement with other causality studies by Calderon & Liu (2003); Fase & Abma (2003) and Christopoulos & Tsionas (2004).

They found that financial development promotes growth, thus supporting the old Schumpeterian hypothesis.

Related Literatures

More studies carried out pinpointed that since the 1970, financial institutions have been growing rapidly with the aim of lifting people out of poverty and promote economic growth. Over the past decades, however, financial systems transformed vastly and nowadays represents a significant and self-sustaining industry of more than 3000 reported microfinance finance institutions (MFIs) servicing 154 million clients worldwide Goldsmith (1969)

McKinnon (1973) and Shaw (1973), a very large literature tries to assess the nature of the relationship between financial systems and economic growth. But, it seems that economists hold different views on the existence and direction of causality in this context Al-Yousif (2002). As it was mentioned by Patrick (1966), the both directions of causality between the two variables can be considered as potentially valid. On the one hand, financial deepening may promote economic growth. This approach, called the supply-leading hypothesis, assumes that the optimal allocation of resources results from the financial systems. Roubini and Sala-i-Martin (1995) as well as King and Levine (1993a,b), De Grego- rio and Guidotti (1995), Levine et al. (2000) or Calderon and Liu (2003) support the supply-leading hypothesis whereas Jung (1986) supports the second way of causality and Demetriades and Hussein (1996) or Greenwood and Smith (1997)and a bidirectional causality.

Levine (2005) suggests that financial institutions and markets can foster economic growth through several channels, i.e. by (i) easing the exchange of goods and services through the provision of payment services, (ii) mobilizing and pooling savings from a large number of

investors, (iii) acquiring and processing information about enterprises and possible investment projects, thus allocating savings to their most productive use, (iv) monitoring investment and carrying out corporate governance, and (v) diversifying, increasing liquidity and reducing inter-temporal risk. Each of these functions can influence saving and investment decisions and hence economic growth. Through these functions financial sector not only promotes private sector development but also supports public sector, infrastructure and household's ability to invest in human capital and consumption smoothing.

In this regard MFIs directly contributes to economic growth through value created of small entrepreneurship and businesses, positive spillovers, improvements in human development indicators (health, nutrition, and education), reduction in inequality and poverty Ravallion (2001). An indirectly contributes to economic growth through interaction with financial sector development captured by improved access to finance (financial deepening), integration of households' financial needs, and most important formalization of so-called shadow informal intermediation which is particularly vast in less developed economies.

Barr (2005) provides other reasons to view financial systems through the lens of microfinance: (i) financially sustainable MFIs promote market deepening that in turn advances financial development (ii) microfinance is a powerful tool in countries with poor governance that hinders well functioning of other development programs (iii) microfinance supports domestic financial reforms by breaking down constraints. The most striking contribution of microfinance, though, is through enlarging the access to finance of households.

Beck et al (2007) demonstrated that financial assets are highly concentrated and therefore asset holdings of the lower-income population are mostly ignored in deriving national resources and aggregate wealth.

According to Palacios (2004) Milton Friedman introduced the idea of committing a fraction of one future income in exchange for financing education. Friedman forwarded the idea with reference to vocational and professional school as oppose to general education for citizenship. This he claims in effect makes an investment in human capital analogous to that of investment in real capital such as machinery or buildings. The individual will receive a higher return on his services then what he otherwise would be able to postponing the earning period and the expense related. Friedman also argue that if capital was equally available to invest in human capital and real capital the rate of return would be roughly the same in the two fields, and that an underinvestment in human capital would reflect an imperfection in the capital market.

Yunus (2007) argues that it is important to distinguish microcredit in all its previous forms from the specific form of credit adopted at the Grameen Bank, which he calls "Grameencredit." Yunus argues that the "most distinctive feature of Grameencredit is that it is not based on any collateral, or legally enforceable contracts. It is based on 'trust,' not on legal procedures and system." In its broadest sense, microcredit includes the act of providing loans of small amounts, often $100 or less, to the poor and other borrowers that have been ignored by commercial banks; under this definition, microcredit encompasses all lenders, including the formal participants (such as specialized credit cooperatives set up by the government for the provision of rural credit) and those of a more informal variety (such as the village moneylender or even loan sharks).

Armendáriz de Aghion at.all, (2000) offer evidence of the success of individual loans that use progressive/dynamic incentives, frequent repayments, and nontraditional collateral to guarantee a loan. Using data from Eastern Europe and Russia, they demonstrate that individual loans can generate repayment rates greater than 90 percent (and above 95 percent in Russia). In industrialized settings, borrowers are more likely to

face more competition, making it more costly to form a borrowing group. In this scenario, loan products will go to different entrepreneurs, with different expected payoffs hence, necessitating different loan amounts. A group contract can be inefficient because it imposes a ceiling on the loan size equal to that given to the smallest member of any potential group. They conclude by suggesting that in areas that are relatively industrialized, individual loan models may perform better than traditional group lending models.

Financial systems can also promote the accumulation of human capital Jacoby (1994). In particular, financial arrangements may facilitate borrowing for the accumulation of skills. If human capital accumulation is not subject to diminishing returns on a social level, financial arrangements that ease human capital creation help accelerate economic growth.

Greenwood and Jovanovic (1990) show how the interaction of financial and economic development can give rise to an inverted U-shaped curve of income inequality and financial intermediary development. At early stages of financial development, only a few relatively wealthy individuals have access to financial markets and hence higher-return projects. With aggregate economic growth, more people can afford to joint the formal financial systems, with positive ramifications on economic growth. With sufficient economic success, everyone participates in the financial systems, enjoying the full range of benefits. The distributional effect of financial deepening is thus adverse for the poor at early stages, but positive after a turning point.

It has also been indicated that financial systems especially through microfinance is a form of financial development that has primarily focused on alleviating poverty through providing financial services to the poor. Most people think of microfinance, as being about micro-credit i.e. lending small amounts of money to the poor. Microfinance is not only this, but it also has a broader perspective which also includes insurance,

transactional services, and importantly, savings. According to James Roth, "Microfinance is a bit of a catch all-term. Very broadly, it refers to the provision of financial products targeted at low-income groups. These financial services include credit, savings and insurance products. A series of neologisms emerged from the provision of these services, name micro-credit, micro-savings and micro-insurance Roubini and Sala-I-Martin (1992).

According to the series theories of Marx (1975), such as distribution theory, reproduction theory, and two-sector equilibrium model, the distribution mode in capitalism society would certainly increase the ratio of accumulation and decrease the share of labor income. With the accumulation of capital, the production capacity expands, while the labor income share decreases, which leads to the insufficiency of consumption. The above two relationships form the basic contradiction of capitalism society, which may cause economic crisis. Although Marx was intended to illustrate the essence of reproduction and distribution in capitalism society, it still can be regarded as one of the earliest important researches on the relationship between income distribution and capital accumulation.

King and Levine (1992, 1993) were the first authors, who examine the empirical relationship between economic growth and financial systems. They concluded from a pure cross-country study, that beyond the positive relationship between the two variables that when countries have relatively high levels of financial development, economic growth tends to be relatively fast over the next 10 to 30 years. They also found that the financial development is positively associated with high future improvement in the capital accumulation rate and efficiency in the capital allocation.

CHAPTER THREE

METHODOLOGY

Research Design

The study was quantitative in nature and employed a descriptive correlation survey design .The descriptive was proposed for describing the area of research and describing the relationship between the study variables and its reliability in showing the degree of relationship between Financial systems and economic growth in selected MFIs using the Pearson's Linear Correlation Coefficient.

Research Population

The target population for the study was 250 and this involved the 40 employees of the two selected microfinance institutions of Rim ltd and *Umwalimu* SACCO both operating in Rusizi District, Rwanda and their close 210 clients with business establishments within Rusizi District, Rwanda.

Sample Size

The researcher selected a sample size of 174 respondents which included 36 employees and 138 clients and this was determined using the Sloven's formula:

$$n = \frac{N}{1 + N(e^2)}$$

Where; n = the sample size; N = the population size; and e = the level of significance, which is = 0.05.

Table 3.1. :

Population Size and Sample Size

Category	Population Size	Sample Size
Employees	40	36
Clients	210	138
Total	**250**	**174**

Sample Procedure

The stratified random sampling has been used to select from a total of 250 people, the 174 respondents including 34 employees, 138 clients in selected microfinance institutions.

Research Instrument

The cardinal material for the study consisted of questionnaire (consult Appendix) that was self administered at the various departments of the financial institutions selected and the clients within Rusizi Town. The questionnaire was made up to obtain responses about respondent's perceptions about the extent to which their businesses receive support from the services from the MFIs and the extent to which their businesses are progressing by indicating the extent to which they agree or disagree with each question given. The questionnaire had four sections; section **A** was having questions on the profile of respondents; **B** was intended to gather data on level of loan scheme (independent variable of the study) and it had 10 questions; section **C** had questions on the level of income and it comprised of 8 questions while section **D** had 7 questions on the level of capital accumulation. All questions in sections **B, C and D** were closed-ended, based on four point Likert Scale, ranging between one to four, where 1=strongly disagree (meaning disagreeing with no doubt et all.); 2=disagree (meaning disagreeing with some doubt); 3=agree

(meaning agreeing with some doubt); and 4=strongly agree (meaning that agreeing with no doubt et all.) and this was done by indicating the number one of the number choices outlined above.

Validity and Reliability of Instruments

Content Validity Index was used to measure the validity of research instruments. The researcher employed at least two experts in the field of study who helped in rating the content in the questionnaire. Thus, the experts assisted in assessing the phrasing of the questions to avoid ambiguity. The questions were therefore revised and each statement either changed or left basing on the recommendations from the two experts. The researcher compiled the responses from raters and computed the content validity index (CVI). The estimation for validity was 0.75 and above, meaning that any value below it would make the instruments invalid.

Table 3.2:

Reliability and Validity of Instruments

	Relevant items	**Not Relevant Items**	**Total No. of Item**	**Content validity**
Questionnaires	21	4	25	$CVI = \frac{21}{25} = 0.84$
Total	**21**	**4**	**25**	

$$CVI = \frac{No\ of\ Items\ Rated\ as\ Relevant}{Total\ Number\ of\ Items}$$

The table above shows that the CVI was 0.84, that were greater than 0.75, hence the instrument was termed to be valid.

To ensure the reliability of the instrument, data collection instruments were pre-tested. All aspects of the research problem were covered in research questions and were relevant to the purpose of this study and finally, the questionnaires were approved by supervisor. Moreover, the questionnaires were pretested before being taken to the field by two experts and the despondences yield the same results, therefore the instrument were reliable.

Data Gathering Procedures

Before the administration of the questionnaires

Before the administration of the questionnaires; an introduction letter has been obtained from the School of Post Graduate Studies and Research for the researcher to solicit approval to conduct the study from respective selected universities; the researcher sought permission from the branch managers of the two selected MFIs. A manager introduced the researcher to the all employees to facilitate her to get the information.

During the administration of the questionnaires

During the data collection process, self administered questionnaires were administered to respondents. The researcher collected them to prepare data on issues of interest for the areas of study.

After the administration of the questionnaires

After gathering the instruments, the researcher started to tally and coding the information gathered and presented every information using SPSS.

Data Analysis

Data analysis was administered with putting into SPSS (Statistical Package for Social Sciences software package). To analyze data on profile of respondents, frequencies and percentages were used. Basic descriptive statistics such as means were used to determine the level loans, capital accumulation and income. To determine whether there is a significant relationship between the independent and dependent variables, the Pearson's Linear Correlation Coefficient at 0.05 level of significance and regression model are used. In order to interpret the data that was collected from respondents, the following mean ranges and interpretations were used for data on independent and dependent variables.

Mean Range	Response Mode	Interpretation
3.26-4.00	Strongly Agree	Very high
2.51-3.25	Agree	High
1.76-2.50	Disagree	Low
1.00-1.75	Strongly disagree	Very low

Ethical Consideration

To ensure that ethics is practiced in this study as well as utmost confidentially for the respondents and the data provided by them, the following were done: coding of all questionnaires; the respondents were asked to sign the informed consent letter; endeavored to be very respectful to all respondents and to all participants who were party of this study.

Limitations of the Study

The anticipated threats to validity in this study were as follows:

Intervening or confounding variables which were beyond the researchers control such as honesty of the respondents and personal

biases. To minimize such conditions, the researcher requested the respondents to be as honest as possible and to be impartial/ unbiased when answering the questionnaires.

Testing: The use of research assistants might render inconsistencies such as differences in conditions and time when the data was obtained from respondents.

Instrumentation: The research tools were non-standardized hence a validity and reliability test was done to arrive at a reasonable measuring tool.

Attrition: A representative sample might not be reached as computed due to circumstances within the respondents and beyond the control of the researcher. Exceeding beyond the minimum sample size was done by the researcher to avoid this situation.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

Respondent's demographic profile

The first research question determined the profile of respondents as regards to their gender, age groups, education level, experience and marital status. The Summary of the profile of respondents is presented in Table 4.1.

Table 4.1:

Demographic Profile of Respondents (n=174)

Gender	**Frequency**	**Percentage**
Male	73	42.0
Female	101	58.0
Total	**174**	**100.0**
Age Group		
20-29	50	28.7
30-39	57	32.8
40-49	32	18.4
50-59	26	14.9
60+	9	5.2
Total	**174**	**100.0**
Education Level		
Certificate	43	24.8
Diploma	87	50.0
Bachelors	43	24.8
Masters	1	0.6
Other	0	0
Total	**174**	**100.0**
Experience		
1-2	38	21.8
3-4	64	36.8
5+	72	41.4
Total	**174**	**100.0**
Marital Status		
Single	30	17.2
Married	84	48.3
Separated	5	2.9
Divorced	2	1.1
Widowed	53	30.4
Total	**174**	**100.0**

Source: Primary Data

Regarding the gender of respondents in this study, it can be noted from Table 4.1 that women formed 58.0 percent of the respondents while men formed 42.0 percent. The involvement of both men and women in this research indicates that the study took into consideration aspects of gender seriously.

Concerning the age group of respondents, it can be noted that most of the respondents (32.8%) were at the age of 30 to 39, followed by the age group of 20 to 29 (28.7%), then 40 to 49 (18.4 %), 50 to 59 all bearing (14.9 %) and lastly 60 and above formed (5.2 %) of respondents. This Difference in age groups among respondents was helpful in that it enabled different views and opinions about the levels of financial systems and economic growth in selected MFIs in Rwanda investigated for academic purpose since elderly and youthful would indicate different views regarding the variables under study based on their age sections.

From the Table 4.1 still, it can be noted that respondents with different education level that is, those who dropped out from the level of certificate, attained diploma courses , bachelors, Master, and other were all represented in the research process though the majority of the respondents were those who dropped out of school the level of diploma (50 %), followed by those who attained certificate level (24.8 %) and then those with bachelor level (24.8 %) , and followed who attained Master level (0.6%), and lastly where no respondent held others level of education.

Concerning the experience of the respondents as clients of the selected microfinance institutions and those working in the microfinance institution, it was noted that most of the respondents (41.4 %) had experience of five and above in the selected microfinance institutions followed by those having from three to four (36.8 %) while least of them (21.8 percent) had only one to two years of experience in the microfinance institutions selected for this study. Experience of

respondents was helpful in that it enabled adequate and critical information on the level loans, capital accumulation and income financial obtained since those with rich experience could provide sufficient and satisfactory information about the variables investigated.

Lastly, studies on the marital status of respondents also reveal that respondents of different marriage status were sampled in this study. The majority of the respondents (48.3%) were married, followed by those who were widowed (30.4%) followed by single (17.2%), followed who had separated (2.9 %), lastly, those who had divorced were the least (1.1%) .This helped in the provision of different information about study variables as influenced by marital status since those married may have different perception about the relationship of the two variables and so does the rest. This information also suggests that many of the respondents were capable of sustaining their marriage as case of separation and divorce were limited.

The extent of financial systems in Selected Microfinance institutions

The second research question in this study was to find out the level of effectiveness of financial systems in the selected microfinance institutions and this objective was also on the independent variables. The major aspects investigated in regard to financial systems in the selected microfinance institutions included the loan for productive asset financing, level of collateral considered to obtain loan is considerable, whether both rich and poor have equal opportunities to microfinance loans, whether microfinance loans are convenient and effective, the level of grace period for loan repayment, whether women also have access to microfinance loans as men, level of loan for agricultural input financing, whether clients can access relatively large amount of loan from the microfinance institutions, whether the interest rates on the loan acquired are relatively

low, and lastly, whether it is easy to access microfinance services. The value of mean computed was used to determine the level of effectiveness of financial systems.

In this regard, the mean range from 3.26-4.00 meant that the level of particular aspect under financial systems was very high, the mean range from 2.51-3.25 meant the level was high, the mean ranges from 1.76-2.50 meant the level of the item was low and lastly, the mean range from 1.00-1.75 meant that the level of a particular item under financial systems was very low. The summary on the level of financial systems in the selected microfinance institutions is presented in Table 4.2.

Table 4.2

Extent of Financial Systems in selected MFIs

(n=174)

Mean index	Mean	Std. Deviation	Interpretation	Rank
There is loan for productive asset financing	2.97	1.07	High	1
The level of collateral considered to obtain loan is considerable	2.92	1.07	High	2
Both rich and poor have equal opportunities to microfinance loans	2.82	1.10	High	3
Micro finance loans are convenient and effective	2.67	.99	High	4
The grace period for loan repayment is quite sufficient for my business	2.59	1.08	High	5
Women also have access to microfinance loans as men	2.56	1.05	High	6
There is loan for agricultural input financing	2.51	1.06	High	7
I can access relatively large amount of loan from my microfinance	2.48	.97	Low	8
The interest rates on the loan acquired are relatively low	2.47	1.07	Low	9
It is easy to access microfinance services	2.30	1.02	Low	1o
Average Mean	**2.43**		**Low**	

Source: Primary Data

The finding from table 4.2 suggested that respondent's rate most item on the level of financial systems in selected MFIS agreed that there is

the loan for productive asset financing (mean= 2,97), the next was the level of collateral considered to obtain loans is considerable (mean= 2.92), third was both rich and poor have equal opportunities to microfinance loans (mean=2.59), this was followed by Micro finance loans are convenient and effective(mean=2.67), the grace period for loan repayment is quite sufficient for my business(mean=2.59), women also have access to microfinance loans as men(mean2.56), and lastly was the loan for agricultural input financing(mean 2.51).

Above results are in agreement with Levine (2005) findings confirming that MFIs contribute to economic growth through several channels, by easing the exchange of goods and services through the provision of payment services, mobilizing and pooling savings from a large number of investors, acquiring and processing information about enterprises and possible investment projects, thus allocating savings to their most productive use, monitoring investment and carrying out corporate governance, and diversifying, increasing liquidity and reducing inter-temporal risk.

With this regards, Loans offered by selected MFIs is purposely used in financial systems for achieving these five functions.

However, they disagreed that the access relatively large amount of loan from my microfinance (mean=2.48), the interest rates on the loan acquired are relatively low (mean=2.47), and to access easily microfinance services (mean=2.30).

Those are disagreement with Beck et al (2007) were demonstrated that financial assets are highly concentrated and therefore asset holdings of the lower-income population are mostly ignored in deriving national resources and aggregate wealth.

The level of Economic growth

The third research objective was set to determine the level of economic growth and this was one of the aspects investigated under the dependent variable that is, level of economic growth.

Basing on this variable, aspects of the level of income in selected microfinance institutions, the improvement in the level of income of the clients, whether the income level of the clients has enabled them to diversify their business, whether the level of clients income has enabled them to increase their level of business investment, whether the increase in clients income has enabled them to increase their stock level, whether their income level has enabled them to access better health services, whether through improved income, their life standards have changed, whether income level of women clients has enabled them to have increased role in socio-economic decision making and lastly on whether increase in their income has enabled them to facilitate their children's education quite well were investigated.

The level of capital accumulation in the selected microfinance institutions was also explored so as to find the level of economic growth. To find out this, aspects of whether loan services have enabled clients to purchase agricultural tools and equipment, whether through microfinance loans, clients have been able to increase household food production; whether clients have been able to purchase livestock with the help of microfinance loans; whether clients have been able to acquire some transport facility with the help of microfinance loans; whether microfinance loan has enabled clients to buy some plot of land to expand my business; whether with the help of microfinance loans, they have been able to improve their land and housing; and lastly, whether with the help of microfinance loans, they have been able to built a house for their business were investigated. In the same way, mean values of each item under the level of income and capital accumulation was also computed

using SPSS and mean range from 3.26-4.00 indicated that the level of a particular item under level of income was very high in the selected microfinance institutions, mean range of 2.51-3.25 indicated that the level of the item was high; mean range of 1.76-2.50 indicated that the level of the item was low; and lastly, the mean range of 1.00-1.75 indicated that the level was very low. The summary on the level economic growth is presented in Table 4.3.

Table 4.3
The level of Economic Growth
(n=174)

Mean index	Mean	Std. Deviation	Interpretation	Rank
My income level has greatly increased in the last five years	2.97	1.02	High	1
Increase in my income has enabled me to diversify my business	2.89	.99	High	2
Microfinance loans have enabled me to purchase agricultural tools and equipment	2.86	.92	High	3
The level of my income has enabled me to increase the level of business investment	2.82	.96	High	4
Increase in my income has enabled me to increase my stock level	2.78	1.02	High	5
Through microfinance loans, I have been able to increase household food production	2.76	1.03	High	6
My income has enabled me to access better health services	2.72	1.08	High	7
Through improved income, my life standards have changed	2.66	.90	High	8
I have been able to purchase livestock with the help of microfinance loans	2.64	1.00	High	9
I have been able to acquire some transport facility with the help of microfinance loans	2.50	1.09	Low	10
The income level of women clients has enabled them to have increased role in socio-economic decision making	2.44	.91	Low	11
With the help of microfinance loans, I have been able to improve my land and housing	2.40	1.11	Low	12
Microfinance loan has enabled me to buy some plot of land to expand my business	2.40	1.02	Low	12
Increase in my income has enabled me to facilitate my children's education quite well	2.39	1.00	Low	13
With the help of microfinance loans, I have been able to built a house for my business	2.10	1.01	Low	14
Average mean	**2.62**		**High**	

Source: Primary Data

Regarding the findings in Table 4.3, it can be noted the level of economic growth measured in terms of income and capital accumulation was generally rated high for most of the items with the exception of items ranked between 10 to 14. The level of economic growth was highest rated on the increased level of income at mean value of 2.97; next was on whether the income level has enabled them to diversify their business rated at the mean of 2.89; followed whether loan services have enabled them to purchase agricultural tools and equipment rated at the mean of 2.86, followed by whether the level of income has enabled them to increase their level of business investment rated at the mean value of 2.82; next was on whether the increase in income has enabled them to increase their stock level rated at mean of 2.78; microfinance loans being able to increase household food production rated at mean of 2.76, then, whether their income level has enabled them to access better health services rated at the mean of 2.72; whether through improved income, their life standards have changed rated at mean of 2.66, next was on whether clients have been able to purchase livestock with the help of microfinance loans rated at a mean of 2.64;

Items that were lowly rated included whether clients have been able to acquire some transport facility with the help of microfinance loans rated at a mean of 2.50, followed by whether income level of women clients has enabled them to have increased role in socio-economic decision making rated at mean 2.44, followed by whether microfinance loan has enabled clients to buy some plot of land to expand their business and whether with the help of microfinance loans, clients have been able to improve their land and housing each of them rated at the mean of 2.40; this is followed by whether increase in clients income has enabled them to facilitate their children's education quite well rated at 2.39 and lastly, whether with the help of microfinance loans, clients have been able to built a house for their business rated at the mean of 2.10.

Considering the average mean of the level economic growth, it was concluded that the level of economic growth measured in terms of capital accumulation and level of income is generally high at rated at average mean of 2.62.

According to the series of theories by Marx (1975), such as distribution theory, reproduction theory, and two-sector equilibrium model, the distribution mode in capitalism society would certainly increase the ratio of accumulation and decrease the share of labor income. With the accumulation of capital, the production capacity expands, while the labor income share decreases, which leads to the insufficiency of consumption. Although Marx was intended to illustrate the essence of reproduction and distribution in capitalism society, it still can be regarded as one of the earliest important researches on the relationship between income distribution and capital accumulation.

Patrick (1966), the both directions of causality between the two variables can be considered as potentially valid. On the one hand, financial deepening may promote economic growth. This approach, called the supply-leading hypothesis, assumes that the optimal allocation of resources results from the financial systems development. Roubini and Sala-i-Martin (1995) as well as King and Levine (1993a,b), De Grego- rio and Guidotti (1995), Levine et al. (2000) or Calderon and Liu (2003) support the supply-leading hypothesis whereas Jung (1986) supports the second way of causality and Demetriades and Hussein (1996) or Greenwood and Smith (1997)and a bidirectional causality. This is in agreement with the results above, where respondents claimed the income and capital accumulation contribute to economic growth.

Significant Relationship between extent of financial systems and economic growth

The forth research objective of this study was to explore whether there is a significant relationship between the level of effectiveness of financial systems and economic growth. This objective also helped in answering the null hypothesis in the study which stated that there is no significant relationship between effectiveness of financial systems and economic growth. To attain this objective the researcher correlated the average mean in Table 4.2 with the average mean in Table 4.3, using the Pearson's Linear Correlation coefficient (PLCC) and the results are indicated in Table 4.4 below;

Table 4.4:

Pearson's Correlations matrix of extent of

Financial system and the level economic growth

Variable correlated	R- value	Sig-value	Interpretation	Decision on Ho
Financial System Vs Economic Growth	.794	.000	Significant Relationship	Rejected

Source: primary data

As far as the data presented in the Table 4.4 is concerned, it can clearly be observed that there is a significant relationship between level effectiveness of financial system and economic growth through the level of loans, income and capital accumulation at ($r = .794$, $P < .000$) at .05 level of significance. Thus, level of effectiveness of financial systems is significantly related to the level of economic growth. The findings also mean that the null hypothesis stated is rejected and the researcher

therefore asserts that the level of effectiveness of financial systems significantly influences the level of economic growth.

The findings also mean that the null hypothesis stated is rejected. Therefore level of effectiveness of financial systems significantly influences the level of economic growth. The results were also confirmed by the regression analysis as presented in Table 4.5

Table 4.5:

The extent of financial System as

Predictor of Economic Growth

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.794	.789	.789	.1019

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	157.388	1	157.388	15152.119	.000
	Residual	1.787	172	1.039E-02		
	Total	159.175	173			

a Predictors: (Constant), Financial System
b Dependent Variable: Economic Growth

Source: Primary data

From the above regression analysis, the strength of relationship between the effectiveness of financial systems and the extent of economic growth has been measured. The findings therefore indicate that the relationship between the two study variables is quiet strong. This is proved by the model of summary in which the R square for the regression model is 0.789. R square shows the amount of variation in one variable that is accounted for by another variable. In this case, respondents' perceptions of effectiveness of financial systems account for 78.9 percent of the total variation in the increase in economic growth in terms of

income and capital accumulation. To avoid overestimating the impact of adding an independent variable to the model, some analysts prefer to use the adjusted R-square value (it recalculates the R-square value based on the number of predictor variables in the model). This makes it easy to compare the explanatory power of regression models with different numbers of independent variables. The adjusted R-square for the model is equal with R^2 at 0.789, which indicates only a slight overestimate with the model. The table summary showed also that, the coefficient of correlation R indicates the strength of relationship between effectiveness of financial systems and economic growth. At R of 0.794 indicates that financial system and economic growth are related perfect positively.

The ANNOVA table shows the F ratio for the regression models. This statistics assesses the statistical significance of the overall regression models. Larger the F ratio, the more variance in the dependent variable is explained by the independent variable. The F ratio 15152.119 indicates the model is highly significant at the 0.000 level. The overall regression results are shown in the ANOVA. The regression model is statistically significant (F ratio=15152.119 probability level 0.000). The probability level 0.000 means that the chances are almost zero that the results of regression model are due to random events instead of a true relationship. According to above analysis, our null hypothesis is rejected, which indicates that the relationship exists between these two variables.

This is in agreement with King and Levine (1992, 1993) was the first authors, who examine the empirical relationship between economic growth and financial development. They concluded from a pure cross-country study, that beyond the positive relationship between the two variables that when countries have relatively high levels of financial development, economic growth tends to be relatively fast over the next 10

to 30 years. They also found that the financial development is positively associated with high future improvement in the capital accumulation rate and efficiency in the capital allocation

According to the Central Bank of the Republic of Turkey (2002), the performance of the financial intermediation plays an important role in real economic activity in all countries in the world, and also in Turkey. Recent experiences in Turkey showed that, the deregulation and the fragility of the banking sector can be very costly for the real economy especially during and after the financial crises. Like other countries in the world, also in Turkey, a healthy banking sector has been assumed to contribute to the growth of the economy.

CHAPTER FIVE

FINDINGS, CONCLUSIONS, RECOMMENDATIONS

Findings

Although there exists evidence indicates that financial systems have positive effects on economic growth. The findings in Table 4.2 showed that the level of effectiveness of financial systems in terms of loans in MFIS is low at an average mean of 2.43. This result may be thought in contradiction with general evidence in the empirical literature. Possible explanation for this result might be related to the fact that exclusion by the MFIs themselves due to their focus on micro entrepreneurs with sufficient repayment capacity; exclusion by groups unwilling to take responsibility for the poor in case of delinquency; self-exclusion due to a fear of credit; product exclusion where the one-size-fits-all working capital loan on offer does not meet their needs; and lastly, emphasis on credit delivery and little attention to the needs of the poorest for safe and accessible savings services .

The findings in table 4.3 showed that the level of economic growth in term of income and capital accumulation is high with average mean of 2.62. This finding supports the theoretical approach in which the loans can be positively affecting on the level of income and capital accumulation. The findings obtained from the regression and correlation model show that there are high a positive significant relationship between financial systems and economic growth at 5% significance level. Furthermore financial systems cause growth. Taken together, the results show financial systems to have a significant impact on economic growth and the findings are compatible with major portion of the literature.

This study is in agreement with Demetriades and Hussein (1999) found that among the Asian countries covered their study, in the case of Sri Lanka did evidence of financial systems caused economic growth.

It is also in agreement with Unalmis (2002), found that in Turkey did causality relationship between financial systems and economic growth.

Al-Zubi et al (2006) examined relationship between financial systems and economic growth for Northern Cyprus and the period of 1980-2000 and the result showed that there is a significant relationship between financial development and economic growth.

Irfan Lal , et all (2009) , in their study in Pakistan research study examined the most burning issue that whether financial systems or financial structure substance economic activity and growth or not. Their finding highlighted that financial structure and financial development are the main source of economic growth. The result reflects that Pakistan should gain if its financial sector grows efficiently but important role must be played by financial institutions to regulate and support financial structure and financial development. The core message to the policymakers is that they should design the policy which promotes the capital market and remove the hurdles and strengthen the health and competitiveness of the banking system, increase accountability and autonomy of financial institutions, restructuring and recapitalization of financial institutions, improve regulation and supervision of all financial institutions that allowing more private banks and non-bank financial institutions to broaden the financial market and they perform their tasks bitterly to accelerate financial development and improve the financial structure that leads to increase economic growth of Pakistan.

Conclusion

There is a high positive significant relationship between financial systems and economic growth. From the above findings of the study the researcher generated the following conclusions as per the study objectives. Most of the employees and the clients of the selected microfinance institutions were female, diploma educated, experienced and married hence having sufficient knowledge about the study variables.

The level of loan schemes in the microfinance institutions in Rwanda is high in items such as the level of loan schemes was the loan for productive asset financing; the level of collateral considered to obtain loan is considerable; on both the rich and poor having equal opportunities to microfinance loans; on microfinance loans being convenient and effective to clients; the level of grace period for loan repayment being fairly effective for clients business; on women having access to microfinance loans as men and lastly, on the level of loan for agricultural input financing. The level of loan schemes is still low in the selected microfinance institutions in the items clients accessing relatively large amount of loan from the microfinance institutions; the interest rates on the loan acquired being relatively low; and lastly, on easiness to access microfinance services.

The level of income is high in terms of the increased level of income of the clients of the selected microfinance institutions; the income level of the clients enabling them to diversify their business; the level of clients income enabling them to increase their level of business investment; the increase in clients income enabling them to increase their stock level; clients' income level enabling them to access better health services; and lastly, clients' standard of living being improved through improved income. However, level of income of clients is still low in aspects of income level of women clients enabling them to have increased role in

socio-economic decision making and on clients' income enabling them to facilitate their children's education quite.

The level capital accumulation is high in terms of the loan services enabling clients to purchase agricultural tools and equipment; microfinance loans being able to increase clients' household food production; clients being able to purchase livestock with the help of microfinance loans; and lastly, clients being able to acquire some transport facility with the help of microfinance loans. However, level capital accumulation in the selected microfinance institutions is still low in aspects of microfinance loan enabling clients to buy some plot of land to expand my business; the microfinance loans helping the clients to improve their land and housing; and lastly, the microfinance institutions helping clients build a house for their business.

Thus, an improvement in the level of finance system terms of loan schemes is likely to improve economic growth in terms of income and capital accumulation. So if the level of financial systems in form of loan schemes improves by one unit, economic growth in terms of income and capital accumulation also increase by almost one.

Recommendations

From the findings of the study, the study noted that levels of Financial systems in form of loan schemes are beneficial to the improvement of economic growth measured in terms of income level and capital accumulation. In this regard;

Micro Finance umbrella organization be established and given strong support by Government and donors as a body to give guidance to the industry. Government support in training of MFIs and their clients as well as capacity building should be enhanced in order to strengthen and professionalize the industry. Increased capital requirements for micro finance institutions especially deposit taking ones should also be

implemented. Licensing requirements, regulation and internal controls should be strengthened. Subject to results of a feasibility study, a mandatory stabilization fund should be established for licensed MFIs.

The government of Rwanda should also try to formulate effective policies that can make the services and operations of private financial institutions especially through loan schemes effective hence enabling their services reach up to the poorest of all in Rwanda.

Improved involvement of women in accessing services of financial institutions or microfinance institutions should be boosted since their empowerment is also a sign of economic growth. This will also increase their involvement in the socio-economic decisions hence achieving higher economic growth.

Improvement in the amount of money lend to clients to undertake businesses should be revised since low lending capacity is likely to affect the level of economic growth.

Financial institutions should also continue providing their clients about important business opportunities, building in them skills that can encourage them expand their socio-economic status hence enhancing economic growth. Business activity monitoring system should be encouraged and improved as through it people's businesses are going likely to be affected by other external factors.

Areas for Further Research

This study was carried out to find the relationship between financial systems and economic growth based on two selected microfinance institutions in Rwanda. The study suggests the following topics for further research.

(1) The role of Agricultural financing input in the socio-economic development of a country.

(2) The asset financing and economic growth in Rwanda.

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APPENDICES

APPENDIX I: TRANSMITTAL LETTER

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OFFICE OF THE COORDINATOR, BUSINESS AND MANAGEMENT
SCHOOL OF POSTGRADUATE STUDIES AND RESEARCH (SPGSR)

Dear Sir/Madam,

May 24, 2011

RE: REQUEST FOR EMILIENNE MUKABATONI - MBA/20029/82/DF TO CONDUCT RESEARCH IN YOUR ORGANIZATION

The above mentioned is a bonafide student of Kampala International University pursuing a Masters of Business Administration (**Banking and Finance**).

She is currently conducting a field research of which the title is **"Financial Systems and Economic Growth in Selected Microfinance Institutions in Rusizi District, Rwanda".**
Your organization has been identified as a valuable source of information pertaining to her research project. The purpose of this letter is to request you to avail her with the pertinent information she may need.

Any information shared with her from your organization shall be treated with utmost confidentiality.

Any assistance rendered to her will be highly appreciated.

Yours truly,

Mr. Malinga Ramadhan
Coordinator
Business and Management, (SPGSR)

APPENDIX II: REQUEST AND CONSENT TO CARRY OUT RESEARCH IN UMWALIMU SACCO

Received on 8/10/2011

UMWALIMU SACCO MUSANZE

Accord favorable

TO THE DIRECTOR MANAGER OF
UMWARIMU SACCO

MUKABATONI Emilienne
TEL : +250788448583
E-mail : batony_rw@yahoo.fr

Dear Sir/ Madam

RE : REQUEST TO CARRY OUT RESEARCH IN YOUR INSTITUTION

This is to kindly request to allow me to conduct research in Umwarimu SACCO as a student in KAMPALA INTERNANTIONAL UNIVERSITY (KIU) pursuing a Master Degree in Business Administration (MBA) in option of Banking and Finance and currently conducting a field research entitled : ***FINANCIAL SYSTEM AND ECONOMIC GROWTH IN SELECTED MICROFINANCE INSTITUTIONS IN RWANDA.***

As part of this research, I will have to collect relevant information through questionnaires. I thus request you to allow me to conduct this study in your institution.

The information that will be approved will be solely for research purpose and shall be treated with utmost confidentiality.

Attached to this letter, is the official request to conduct research from the School of Postgraduate studies and Research (SPGSR).

Thank you for your cooperation

MUKABATONI Emilienne

APPENDIX III: REQUEST AND CONSENT TO CARRY OUT RESEARCH IN RIM LTD

RIM S.A. RESEAU INTERDIOCESAIN DE MICROFINANCE NKUNGANIRE

AGENCE DE RUSIZI B.P 204 RUSIZI Tél. : 546276 / 0788611045

Rusizi , 25/07/2011

TO MUKABATONI Emilienne
KIU

RE: REQUEST TO CONDUCT RESEARCH IN RIM SA

Following you request to conduct research in RIM Ltd and due to the relevance of your research topic entitled ***Financial system and Economic Growth in selected Microfinance institutions in Rwanda.*** , we are glad to inform you that you were allowed to conduct your research in our institution.

Your faithfully

Manager

AGENCE RUHENGERI RIM Ltd NKUNGANIRE

MUKANOHELI M.Francoise

APPENDIX IV: RESEARCH INSTRUMENT

Dear Sir/Madam,

I am a student of Master of Business Administration of Kampala International University carrying out a study on *"Financial Systems and Economic Growth in selected MFIs in Rwanda*. I wish to inform you that you have been selected to participate in this research. This questionnaire is purely for academic reasons and nothing else. You are kindly requested to respond to these questions to the best of your knowledge. Your responses cannot even be tracked since the questionnaire is anonymous. Your assistance will be highly appreciated. I request you to give answers by ticking in the boxes provided.

Yours truly,

.....

Emilienne MUKABATONI

Section A: Demographic Information

Gender: Male ☐ Female ☐

Age: 20 -29 ☐ 30– 39 ☐ 40 – 49 ☐ 50 - 59 ☐

60 and above ☐

Education level:

Certificate ☐ Diploma ☐ Bachelors ☐ Masters ☐

Others ☐

Experience in or with Microfinance institution:

1 – 2 ☐ 3 – 4 ☐ 5 and above ☐

Marital status:

Single ☐ Married ☐ Separated ☐ Divorce ☐

Separated ☐ widow ☐

Direction: Please write your preferred option on the space provided before each item. Kindly use the rating guide below:

Response Made	Rating	Description
Strongly Agree	4	You agree with no doubt et all.
Agree	3	You agree with some doubt
Disagree	2	You disagree with some doubt
Strongly Disagree	1	You disagree with no doubt et all.

SECTION B: Extent of financial systems in terms of Loan in Selected Microfinance Institutions

_____1. Micro finance savings are convenient and effective

_____2. It is easy to access microfinance services

_____3. I can access relatively large amount of loan from my microfinance

_____4. The interest rates on the loan acquired are relatively low

_____5. The grace period for loan repayment is quite sufficient for my business

_____6. Both rich and poor have equal opportunities to microfinance loans

_____7. Women also have access to microfinance loans as men

_____8. The level of collateral considered to obtain loan is considerable

_____9. There is loan for agricultural input financing

_____10. There is loan for productive asset financing

APPENDIX V : RESEARCHER'S CURRICULUM VITAE

Personal Information

Names: Emilienne MUKABATONI

Nationality: Rwandese

Marital status: Married

Date of birth: 04th August 1980

Place of birth: Rusizi District

Phone: (+250) 788448583
C/0 (+250)788488037

Email: batony_rw@yahoo.fr

Education level

2002-2005: Kigali Independent University **(KIU) Bachelor degree in Economics Program,** with Specialization in **Bank and money.**

Research

2004 to 2005: I carried out a research on **Contribution of investment on GDP** *in case of award of Bachelor Degree.*

Experience

April 2008 up to date: Procurement Officer in Bushenge Hospital/ Nyamasheke District

September 2008- March 2009: An Accountant of Global Funds Project in Bushenge Hospital/ Nyamasheke District.

September 2007-April 2008 : Community Support Coordinator of CRS/ Aid Relief for HIV/SIDA in Bushenge Hospital/ Nyamasheke District

2004- May 2007: Administrative Assistant in General Construction Enterprises / Kigali, Gasabo District

2002-2004: An Accountant Assistant in General Construction Enterprises / Kigali, Gasabo District

November 2002- January 2003: Project assistant in Urukundo rw'Imana Association program in charge monitoring and evaluation of projects for generating revenue for people live with HIV/SIDA

❖ **Through this position: Project AID Relief/CRS**

I have been trained and work with Catholic Relief Service/Rwanda in case of adherence in ARVs for people living with HIV in community ; Monitoring and evaluation of Aid relief activities in Bushenge hospital in where I was charged :

- To provide technical input into the development of operational research, evaluations, program assessments and surveys, such as inventory of children above 5 years with HIV/SIDa and Health community of the adult with HIV/SIDA , Nutrition conditions of the Persons with VIH/SIDA in the community
- Maintain familiarity with current literature and best practices in social development , counselling of the couple living with VIH/SIDA, especially in regard to performance monitoring; program level data gathering/validation; trend monitoring and reporting.
- Provide technical direction, strategic planning and oversight of the implementation of the Health Team M&E activities related to the adherence , and ensure that planned development results are achieved in a highly efficient, effective and timely manner, consistent with Aid relief/CRS regulations, policies and development principles over all the Bushenge hospital health center
- Program Monitoring and Reporting: Responsible for the timely compilation and reporting of indicators for monitoring the progress the community support officers of the health center for partners receiving funding through AID Relief/CRS.
- Coordinate with and provide technical advice, direction or assistance to the cooperatives of the benevolent of the people living with VIH/SIDA.
- create the micro project generating of revenue with community and problem resolution in community like socio-economic problems within the Community of people living with HIV , Organize and participates in community events, develops relationships with local governmental authorities, project partners and local stakeholders cover Bushenge Hospital zone; Conduct meetings with the communities support of 7 Health center cover Bushenge zone, and meeting with the volunteers cover Bushenge hospital zone and send reports to the CRS Aid relief Board and Hospital board.

❖ **Through this position: Project GLOBAL FUND**

- Global Fund in case of managing Budget, analytical accountant, and general accounting through TOMPRO in Bushenge Hospital; Monitors budget and expenses of 4 health centers cover Bushenge Zone in Global Fund Project;
- Oversees inventory, supplies, bank accounts and payments ; Supervision and evaluation of global Fund Activities in 4 health centers in that the project has run ;
- Responsible for financial processes and managing the global fund budget;
- Prepares quarterly financial and operations reports and send it to the Global Fund Officer in Kigali; Prepare quarterly request of finance budget of all Bushenge hospital zone.

❖ **Through this position: Procurement Officer in charge of :** Implement the basic tools of public procurement Operations Manual, guidelines and documents management contracts not in accordance with the requirements of the project implementation manual; Develop mechanisms for monitoring the performance of contracts; Develop mechanisms and practices necessary for the integrity of contracts for which the ranking system; Monitoring the progress; Operations planning procurement; Analyze the differences between the achievements and plan for procurement; Prepare and ensure proper records management tender; Attend Opening and evaluation of tender dossiers; Prepare contracts after obtaining no-objection; participate in Hospital Budget plan and strategic, operation plan.

Computer Skills

Familiar with Ms Office:

1. I am Familiar with Ms Office: Word, Excel, Access and Power point; for more than five years for my researches and projects.

2. Internet used for communication and Research.

3. Econometrics Software (Eviews) and Accounting software (SAGE, and Quickbooks and TOMPRO).

Skills & Abilities	**1**. Good understanding of questionnaire designing, data collection, data entry, data analysis and report writing skills. **2**. Management and interpersonal skills, Good team player, Good leadership as responsibilities are concerned and communication skills all developed through the different positions held. **3**. Self-motivated full of Flexibility and Open minded person as a hard worker. **4**. Negotiation skills.
Languages	Fluent in French, English, Kinyarwanda (Native speaker).
Hobbies and interests	**1**. Extensive reading for new knowledge and taking time to meditate on important issues. **2**. Being honest first with myself and take responsibility for my actions 3. Watch TV, sing and play basketball

The information above is sincere and true.

MUKABATONI Emilienne