DETERMINANTS OF SMALL BUSINESS OWNERSHIP: A CASE STUDY IN THE INFORMAL SECTOR OF NAIROBI

By

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DECLARATION

This research paper is my original work and has not been submitted for a degree in any other university

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This research paper has been submitted for examination with our approval as university supervisors

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DEDICATION

This study is specially dedicated to my husband Kenneth, my sons Kevin and Keenan and my grandmother Njambi.

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ABSTRACT

Economic hardship in Kenya has led to many reforms and the focus of public policy now is on poverty eradication. Micro-finance is widely seen as a tool for breaking the constellation of forces that make households desperate and keep them in a state of poverty. The majority (52%) of the Kenyan population according to 1989 population census are women. Most of these women are either unemployed or employed in informal sector enterprises. According to national medium and small size enterprise baseline survey of 1999, more men than women are employed in micro and small enterprises, as well as in other kinds of self employment.

Historical experience has shown that rapid and sustained growth cannot be experienced without addressing the issue of poverty. Micro finance (the funds to finance small businesses) is vital for the informal sector as it caters for the disadvantaged in society - who if given a chance can generate a lot of wealth to uplift the ailing economy. We should resurrect the goose that lays the golden egg. That is, we should improve the productivity of the people, on whom the health of the economy depends.

This study has used primary data to analyse determinants of micro-enterprise ownership in the informal sector in Nairobi. The results show that micro-finance has a positive impact on probability of owning micro-enterprise indicating that its availability would increase access to micro-enterprises sector by the poor.

CHAPTER ONE: INTRODUCTION

1.1 Background

The performance of the Kenyan economy over the last decades has been rather disappointing as compared to the high growth attained in the first decade of independence. Among the reasons cited for the poor performance of the Kenyan economy are the declining savings and investment levels. Other factors related to this decline include falling prices for primary commodities in international markets.

Research has found that although only a small fraction of national income goes to women, most of this income is directed to children. in whom investments have high social payoffs. This shows that given a chance women can uplift the standard of living of household members because they spend their income on consumption smoothing activities such as education and health of children, who are future supporters of the household. Micro-finance can play a vital role in assisting women to undertake these consumption smoothing activities better. Evidence exists to show that poor people are capable of moving out of poverty if financial services are available to them either in form of credit or revolving funds (Aleke 1991). Since the majority of people in Kenya are living below the poverty line, (less than a dollar per day), supporting micro-enterprise through extension of micro-finance has a major role to play in poverty alleviation.

Micro-finance is the provision of credit, and saving opportunities and other financial services to small and medium-sized enterprises. Its pioneers in Kenya are the Kenya Rural Development Programme (K-rep) and a number of cooperative societies. It

represents a significant departure from earlier arrangements in providing credit
public and private financial institutions at a subsidized rate often with littl
recovery occurring of the amount lent.

Policies to promote these small enterprises among others must be gender focused
women play the major roles in this sector. For example, 1999 population census
that women outnumber men and most of them live in rural areas. Therefore a f
factors that increase their income earning capacities can provide insights into poli
are effective in reducing poverty.

The study of micro and small scale enterprises in Kenya was first born in 1972 u
informal sectors but it is only in the 1990s that national-wide studies focus
generating baseline data on micro-finance started to be implemented in the count

Micro-finance plays a very vital role in the Kenyan economy. This is because fi
the first and foremost tool for any economic development but the majority of K
especially women cannot venture into the major banking institutions like Barcla
or the Standard Chartered to get the necessary capital. The reason being high
requirement which these people lack; and moreover because in the African
women do not inherit land which is the major security offered for loans.

Recently, the banks raised the minimum deposits; furthermore the major inter
charged on loans continues to rise, leaving the common man in a desperate situ

far as business and consumption needs for finance are concerned. There is need to develop alternative sources of finance for small business operators. Micro-credit and its effects on access to small-enterprises deserve attention in this regard.

1.2 Research Problem

Micro-finance institutions constitute a group of borrowers who guarantee each other. The security is the peer pressure to pay a loan, unlike the security that is required by formal banking institutions. It first started as an initiative to help low income communities generate income, by encouraging them to run tiny business enterprises that were owned by the community. These were known as income generating projects.

Micro and small enterprises which are funded by micro-finance institutions are very important as they provide employment and income to people. They are often, but mistakenly thought of as homogeneous, which implies that they can be helped by one type of assistance. Small and micro enterprises are highly differentiated, an aspect that should be recognized in designing finance schemes for them.

There is evidence that micro-finance exists but people are not aware of who are the main borrowers and where these borrowers are found. Similarly, evidence has shown that credit to micro-enterprises have been increasing with time and micro- finance institutions continue to increase, but it is not clearly known who are these potential borrowers and where they are located.

According to Sessional Paper No.2 of 1992 on small scale enterprises and Juakali development, a number of measures were proposed to improve access to finance and micro and small enterprises which up to date have not been adhered to because of some hindrance such as political factors.

This study attempts to bridge the knowledge gap that exists concerning the effect of micro-finance on entry into micro-businesses in the informal sector in Nairobi. It will further highlight policies that can be used to target credit to poor men and women in the informal sector, to enable them own small businesses.

1.3 Specific Objectives of the Study and Significance

The specific objectives of the study were:

1. To assess the role of micro-finance in accessing micro-enterprises in the informal sector of Nairobi.
2. To establish gender specific roles that can be supported via micro-credit, to diversify livelihoods among poor, especially women in the informal sector.
3. To suggest policy recommendations for improving the welfare of the poor, especially women in the informal sector.

The output of this study is useful in improving policy design, implementation, monitoring and evaluation of micro-enterprises. This is important because micro-finance helps the majority of people who want to set up small business but who cannot venture into banking institutions to acquire the necessary finance.

CHAPTER TWO: LITERATURE REVIEW

2.1 Previous studies

Several attempts to document use of micro-credit by the poor have been made. Aleke (1989) made the first attempt to document the organizations that offer financial services for Jua Kali sector in Kenya. He did a more comprehensive survey in 1991 which showed that 41 organizations were supporting small and micro enterprises. His other research in 1993 showed that there are 15 government institutions, 16 private sector organizations, 50 non-governmental organizations and 11 donor organizations supporting micro and small enterprises.

The 1993 baseline survey estimated that the number of micro and small enterprises in terms of employment creation, income generation, economic diversification and dynamism has made the sector to be the last hope for future industrial growth and development. In order to succeed in this role, adequate finance is crucial at any stage of micro and small enterprises. Capital for business start-ups operations and expansions, all present unique problems and financial needs for micro and small enterprises (McComirk and Kinyanjui, 1994, Compero, 1995).

Page and Steel (1984) as quoted by Odera (1989) state that a dynamic and growing small enterprise sector can contribute to a wide range of development objectives. They distinguish between small scale enterprises as serving mainly lower income groups while large scale ones supply upper income groups. They identify demand side problems of small enterprises as including unequal distribution of income. This shows that finance could be one of the factors hindering access to small enterprises among the low and middle income groups.

Harper 1974 as quoted by Kimuyu, 1977 said that promotion of businesses involves more than just mere lending of money. He pointed out that businessmen could be helped through technical assistance, education and training in specific methods of effective business management. He continued to say that if small scale businessmen can be shown how to make better use of their existing resources and be trained to use then more efficiently, they will be able to generate the capital they want from internal resources and also make better use of resources when such are considered appropriate. This shows that own business success will also depend on its internal management holding other factors constant.

According to Ohkawa and Tajima (1976), in developing countries small medium scale enterprises have been troubled with financial and managerial difficulties because of their handicaps in obtaining funds. Because of these reasons. they continue to assert that policies for their protection be considered which among others include policies for:

- procurement of needed funds and capital (fiscal and financial policies for small-medium scale enterprises such as credit guarantee);

- education for small-medium scale enterprises (the system for providing guidance for them was improved by passage of law on managerial and technical improvement of small and medium enterprises,1963).

Gordon Donald, (1976) has shown that credit is very important in development. According to him financial credit is the most universal and flexible transferable form of economic resource. With cash obtained via credit one can buy anything that is for sale. He asserts that while goods and services could be transferred to desired parties by administrative allocation. the transfer can be more easily effected by credit and with much greater freedom of choice and efficiency. This shows that finance and in our case micro finance, is very important in own business, though other infrastructural factors cannot be ruled out.

Credit finance enables a producer to bridge the gap between the production and sale of goods. It provides people and businesses with the capacity to exploit economic opportunities whenever and wherever they occur. (Henry Okero, 1999). Okero continues to say that, access to credit removes the pressure imposed by sudden and unexpected demand for cash on the enterprise. It also provides an opportunity to an investor to acquire more assets now than is possible from the current resources against the expected future income. This shows how important micro-finance is in accessing or owning a small-enterprise.

According to the national baseline survey of 1999, about half (52.6%) of the total MSEs employment is comprised of women. There appears to be no significant difference in the share of one sex or the other in MSE employment. Furthermore, location does not appear to favour one sex over another in employment or in setting up own business (Table 1).

Table 1: Small Enterprise Workers by Gender and Location, 1999

Gender of owner	Sex of MSES workers (including working owners and family members)		Total for the country
	Share of female workers (row %)	Share of male workers (row %	
Nairobi & Mombasa	53.8	46.2	100.0
Major towns	52.8	47.7	100.0
Smaller towns	44.2	55.8	100.0
Rural areas	53.0	47.0	100.0
TOTAL	52.6	47.0	100.0

Source: National MSEs Baseline Survey 1999. (CBS, K-REP, ICEG)

According to Kinyanjui and Munguti (1999) in micro and small enterprises in Kenya, women are concentrated in enterprises that conform to their traditional gender roles. For example, food processing and garment making at the micro enterprise level are largely seen as a female domain. Male entrepreneurs are taking up processing of non-traditional food products such as juice making and popcorn making. Women spend fewer hours at the business location. This is because they have more household and family responsibilities to attend to.

Marital status has been shown to be an important factor in access to credit and control of business enterprise, e.g., where the wife may operate a business and the husband controls the money. This can cause problems. According to Kinyanjui and Munguti (1999) nearly three-quarters of the respondents in their study were married but twice as many women as men were divorced/separated or widowed.

A report by CIDA shows that supporting small and micro enterprises contributes to goal of poverty reduction, because small enterprises create employment and income for the poor. As small businesses expand in both rural and urban areas, they can bring greater regional and social equity. Since many of these enterprises are owned by low income women there is need to promote their full participation in order to achieve development.

According to Adams et. al (1984), poverty alleviation through the provision of subsided credit was a center piece for many countries development strategies from the early 1950s through the 1980s. but these experiences were nearly all disasters. This is because much credit was diverted to the politically powerful, away from intended recipients. This shows that women have been left behind since traditionally they are not politically powerful. Likewise credit seems to go to politically powerful areas. According to Gloria (1995) the success of almost all business activities is dependent on the availability of credit since business ideas are seldom synchronized with resources. This lack of synchronization between the users of resource and the suppliers of resources calls for a medium of interaction between the two which can be provided by the stock exchange, banks and often non-bank financial institutions. But in LDC stock markets are not developed, thus leaving banks and non-banks financial institutions as the major players in resource mobilization. But as seen above banks have requirements, which a common man living on less than a dollar per day cannot meet. This means that formal financial systems do not serve the interests of MSEs. This calls for non-bank financial institutions or commonly known as micro-finance to support micro-enterprises.

Available information shows that MSEs projects cover most of the country geographically though Nairobi seems to have a higher level of representation. This may be justified by the fact that Nairobi has the highest concentration of the MSEs. In contrast, most of the districts in the arid and semi-arid areas particularly those in North Rift valley and North Eastern provinces, tend to have the fewest concentration of MSE projects. In some instances, it is only those national government founded projects that are available in some of these districts. This shows that micro-enterprises are unevenly distributed. Various attempts have been made to estimate the volume of credit to MSEs (see e.g, Kiiru, 1991).

Table 2 : Loan Amounts Disbursed to the MSE Sector by Institution.

Institutions	Amount (in ksh million)
Commercial banks	2200.0
DFIs (Development Financial Institutions)	1268.0
NBFIs (Non bank financial institutions)	1600
NGOs (Non-gocernment organizations)	50.2
Others	272.0
Total	5390.2

Source: Kiiru (1991)

Table 2 shows that commercial banks and non-bank financial institutions have the largest share of MSEs financial support. But most of these commercial banks. DFIs, and Non Bank Financial Institutions target small scale enterprises (those employing 5 to 50 people) which requires large loans than micro-enterprises who form a majority of the MSEs. Out of estimated Kshs 5.4 billion given to MSEs only 127.5 million is estimated to be strictly collateral-free. Most of the MSEs do not therefore have access to more than Kshs 5.2 billion because of lack of collateral. This shows that collateral requirement besides other factors is a major constraint to MSEs access to credit (Kiiru,1991). In the African life setup, women do not own properties that can secure collateral.

Based on 24 organizations the study by Aleke and Ongile, (1994) show that the volume of credit disbursed to MSEs from 1990 through 1992 has been increasing over time.

Table 3 : Loans to MSEs, 1990 - 93

Institution	1990	1991	1992	1993
KIE	43,200,000	98,300,000	105,000,000	246,500,000
SEFCO	30,992,643	38,792,610	53,884,750	123,670,003
ICDC	20,952,000	19,778,000	-	40,730,000
K-REP	-	-	22,698,000	22,698,000
TOTAL	95,144,643	156,870,610	181,582,750	436,598,003

Source :Aleke and Ogile (1994).

According to Dessing (August 1988) credit is the constrait most frequently cited by micro-enterpreneurs perhalps because it is most readily identifiable, not necessarily the most severe constraint. This shows that there are other factors apart from credit that may affect access to micro-enterprises. He continues to say that the (informal) credit market (micro-finance) still does not clearly indicate a severe capital shortage.

According to Dessing (1988) there is need to test rigorously whether credit is a constraint on access to micro-enterprise ownership. Lack of savings mobilizations by informal financial institutions (IFIS) leads to poor access to small business opportunities. He asserts that fast credit or minimalist credit is best pursued with already established enterprises that operate in a well developed environment, i.e. an environment which provides them with adequate training, technology, information, and support services. This shows that in addition to micro-enterprises there are other factors which could be equally important in access to micro-enterprises. Therefore micro-finance is a necessary but not a sufficient factor in accessing micro-enterprises.

Paul M. Syagga et al (October,1989) asserts that women have a very week position as far as access to credit facilities is concerned. This is indicated by women's weak position in access to loans and mortgage facilities offered by Housing Finance Company of Kenya (HFCK) as supported by office index card records. Table 4 shows the distribution of HFCK loans and mortgage facilities (urban residential property) by sex for the period 1965 – 1976.

Table 4: Loans by Social Class of Borrower

Social status of borrower	Total number	Percentages
Mr	3377	81.99
Mr & Mrs	478	11.60
Miss	102	2.48
Companies and partnerships	102	2.48
Mrs	43	1.04
Mr & Miss	9	0.22
Municipalities	7	0.17
Mrs & Miss	1	0.02

Source: Adopted from table 6 in Gutto (1976, page 69)

The authors assert that, their informal discussion with some of the officials of HFCK confirmed that this trend has not changed significantly in favour of women.

According to the study, formal education, informal training and low paying jobs are variables which reinforce each other to create and maintain a disadvantaged position for women in terms of access to credit and acquisition of urban property. This indicates that even when micro-finance is kept constant, there could be other factors which significantly affect access to micro-enterprises by women. These factors seem to affect each other, for example, Gutto, (1976) showed that in old Uganda road, formal education in addition to influencing the occupational status of a person also affects a person's ability and tendency to gather information from the media. In their study in old Uganda road, Gutto, (1976) also found that the lower status of women is also maintained when one compares the occupational status of men with that of women.

A workshop report in Addis Ababa on "handcrafts and small scale industries and development for women in francophone countries identified various problems faced by women when venturing in handcrafts and small industries; these problems have not changed much with time; they includes:

- Drudgery of their day to day life (in both rural and urban areas) which lead to less participation of women in economic development.
- Women not being sensitive about their own situation and ability to contribute to the development of national economy.
- The law being detrimental to their playing a role in economic development.
- Various social problems which deter them from playing their role in society.

This show that women have been facing problems in accessing small enterprises as compared to men.

Poverty in Kenya

Killick and House (1981) as quoted by Mccormick (1988), observe that poverty in Kenya is only exceptionally life threatening. According to Killick and House (1981), although over a quarter of the country smallhold households are classified as living in poverty, the incidence of severe malnutrition is light; rather poverty often takes the form of a chronic inability to generate enough cash to acquire even the simplest material comforts, to send children to school, or save for future needs. Except for better access to health services. the situation of urban poor does not differ markedly from that of their rural counterparts. This shows that there is need to fight poverty even in urban areas and one of the ways could be establishment of micro-enterprises.

Informal sector

The ILO report of 1972 defined informal activities to be those activities characterized by

- ease of entry
- reliance on indigenous resources
- family ownership of enterprises
- small scale operation
- labor intensive and adapted technology
- skill acquired outside the formal school system
- unregulated and competitive markets

One of the key questions ILO raised about those small informal businesses included.

How do these businesses gain access to the resources they need to operate?

This means that access to small enterprises have been a major concern to many economists. For the purpose of this research we also analyzed non-financial factors affecting various aspects of micro-enterprises like education and gender.

However Rampe (1972) as quoted by Obilo (1989) addresses himself to the perennial problem of categorizing the informal sector activities. He argues that the informal sector can be classified into two categories:

- Intermediate sector
- Community of the poor

The "community of the poor" he described it as being composed of the people who migrated to the city in order to gain entrance to the formal sector. They view their current plight as temporary and still have hope of admission into the formal sector. The intermediate sector activities, despite their typical small size provide a better than average income to their owners. This shows that small businesses are very vital and could serve as a poverty alleviation tool.

Policy Towards Small Business

After Kenya attained independence, policies were formulated which were geared towards businesses development. Sessional paper on employment for 1973 used the term informal sector for the first time. High growth rate for urban informal sector was predicted in this paper. At this stage however, there were few specific programmes of assistance for very small businesses and in many places police harassment continued, (House, 1981) as quoted by McCormick 1988). Kenya's development plan of 1979 promised to end this harassment of the informal sector. However, even today, police are still fighting with hawkers in the street of Nairobi.

The government continued to elaborate its plan for promoting the informal sector. for example in Sessional Paper No. 1 of 1986, in its attempt to project the country's economic development to the year 2000, it extolled the merits of the informal sector. The informal sector is desirable in that it:

- conserves scarce foreign exchange
- requires very little capital to create jobs
- relies primarily on family savings
- often provides their skill training at no cost to the government
- a prime training ground for future African entrepreneurs
- offers an unmatched potential as a source of new jobs for the expanding labour force.

However, the government's current policy on small business remains as spelt out in Sessional Paper No.2 of 1992 on small scale enterprises and Jua Kali Sector development (Aleke, 1999). He continued to assert that in order to improve access to finance and small business, a number of measures were proposed of which the following have been implemented:-

- Banks and DFIs can now charge for all activities such as loan appraisal and feasibility studies.
- The school of monetary studies has some courses covering micro and small enterprises.

This shows that the government is somehow committed to the promotion of small businesses.

Overview of constraints to business ownership in Nairobi

Although Nairobi is small compared to other cities in the continent, it has a high population of 3 million. Rural urban migration and high population growth rate due to reduced mortality rate and increased fertility rate has contributed to this situation House, (1981).

McCormick (1988) asserts that own businesses in Nairobi face the problem of poor management, technology, education and skills, security and finance. This has not changed much with time though Kenya's current economic hardship has made it worse.

The problem of raw materials supply is another constraint that small scale entrepreneurs face (Page and Steel, 1984), a problem also identified by Child (1973). In his empirical study of small scale enterprises Child (1973) identified lack of raw materials as a major constraint on small business development. Raw materials are specific to the type of activity being carried out. In this connection, Mugo notes that the availability of raw materials at affordable prices is an important determinant of good performance of businesses. This shows that raw materials supply is an important factor affecting performance of small firms.

Other factors according to Mugo(1991) which affect small businesses include the policy bias against such firms and the regulations disfavouring them. Existing policies on capital availability for example tend to make capital cheaper for large producers than for small producers. In most less developed countries the overall policy environment is skewed against small producers and is aimed at provinding special benefits to the large manufacturers. This policy makes very expensive to small scale business.

2.2 Overview of the Literature

Although the literature reviewed was very general and has failed to examine quantitatively how macro finance affects micro-enterprises it revealed a wide range of factors that affect such firms. The factors are mainly socio-economic in nature. The literature offers little insight into factors determining ownership of small-scale businesses, especially the role played by credit. Moreover, the role played by location is not analyzed. For example, from the literature, it is noted that credit will provide people and business with the capacity to exploit economic opportunities whenever and wherever they occur but does not analyze the effect of credit. (see e.g. Okero, 1999).

From the reviewed studies, education has a mixed role in the ownership of small businesses. Mugo (1991) notes that education is important in helping people own businesses but Wahome and Ng'ethe(1987) do not see education as important in enabling people establish own businesses. We examine formally, the role played by education in business ownership in Nairobi.

CHAPTER THREE: METHODOLOGY

This chapter presents data sources, discusses sampling procedures, and highlights difficulties encountered in the field. We also present the framework for analysis and discuss model estimation procedures.

3.1 Sampling Procedure

The first stage consisted of stratification of the administrative divisions of Nairobi. This was necessary in order to get a representative sample of informal sector firms in Nairobi. In order to avoid the clustering effect and to attain homogeneity the sample, 150 enumeration areas were selected across the nine administrative divisions of Nairobi. Due to the uneven distribution of households in each division, the sample was proportionate to the number of households in each division.

In the second stage, enumeration areas were selected from each division from the 1999 enumeration areas. In the third stage, 35% of the total number of households was selected from each enumeration area using systematic random sampling. The sampling frame was made up of list of households compiled by the Central Bureau of Statistics.

In the fourth stage, biographies of individuals drawn from the sampled households were taken by intervention.

3.1 Model

The study analysed the determinants of entry into small-scale businesses (micro-enterprises), with a special focus on the role played by micro-credit. To achieve the objective of the, binary logit model was used. We used binary logit because it describes a discrete situation. In our case, a person either had a small business or not. The role of micro credit controlling for effects of other factor) was examined through a logit regressions model. Maddala, (1983) and so we adopted the logit approach because its functional form is simpler. Formally, the probability (P_i) that person i has access to a small business, conditional observable can be expressed as

$$P_i = \frac{1}{1+e^{-z}} + E \qquad \text{.................................(1)}$$

Where

Pi = probability that person i has had access to small business

$Z = X\beta + E$, a logit index .... (2)

X	=	Vector of determinants of access to a small business
β	=	Parameters to be estimated
E	=	A vector of error terms that follow a logistic distribution.

Specialising in the linear case, the equation for the logit index can be re-written as

$$Z = \beta_0 + \beta_1X1 + \beta_2X2 + \beta_2X3 + \beta_4X4 + \beta_5X5 + \beta_6X6 + \beta_7X7 + \beta_8X8 + e \qquad \text{... (3)}$$

Where

Z	=	Logit Index
X1	=	Age in years
X2	=	Education in years
X3	=	Employment Status (whether or not in wage employment)
X4	=	Family size (number of children born alive)
X5	=	Sex (1=female)
X6	=	Location of enterprise
X7	=	Sources of funds (1 =credit to small enterprises)
X8	=	Second source of income
e	=	stochastic error term with logistic distribution

Ordinary least squares is the most common linear estimation method but the reason why we did not use it is that the estimated probabilities may not lie within the logical limits of 1 and 0. This problem can be solved through truncation method. But an alternative way of solving this is by use of a logit technique which guarantees that the estimated conditional probabilities lie between 0 and 1 (Gujarati., 1978).

3.2 Data

The dependent variable in equation (1) shows whether a person has a small business or not. Unpublished data from a NURIP (Nairobi Urban Research Integrated Survey) Survey was used in this study. The survey was conducted by IFRA (institute of french research in Africa) in collaboration with Central Bureau of Statistics (CBS) and the university of Nairobi. The total sample used in this study was 20,999 individuals. The survey collected data on 184 variables out of which 9 have been used in this study.

The research was constrained by data from the NURIP (Nairobi Urban Research Integrated Survey) survey. The study was conducted in Nairobi from January 2001 to

August 2001. The data were collected from all the eight administrative divisions of Nairobi: Central Pumwani, Makadara, Embakasi, Westlands, Dagoretti, Kibera and Kasarani. Nairobi city was chosen purposively as it is the capital city of Kenya and is the largest city in East Africa. It was an appropriate choice for this study as it has a very diverse population and a variety of small enterprises within the informal sector.

3.3 Hypotheses and working definitions

The study tested the following hypotheses:

- Age is positively related to the access of micro-enterprise up to a certain age, after which the relationship becomes negative.
- There is a negative relationship between marital status and access to micro-enterprise. Women's entry into micro-enterprises is conditioned by marriage, with probability of entry being higher among unmarried women, because unmarried women have family responsibilities.
- Higher education is expected to have a negative relation to the entry into the micro-enterprise sector because those people who are educated can seek employment in the formal sector.
- The higher the number of children, the more likely that someone would be self-employed in a micro-enterprise. The hypothesis states that a large family size increases the burden in terms of basic needs, and therefore people would enter into micro-enterprise to find an alternative source of income.

- Being a Muslim, a an Akorino or Seikh is negatively related to business ownership. This is because Seikh, Muslim and Akorino religions discourage their members, especially women from doing business.
- It is hypothesised that micro credit or finance is positively correlated with establishment of a small business.
- People who are employed are less likely to enter into micro-enterprise because they have a source of income, even if this income is not enough, they do not have enough time to venture into micro-enterprises.
- Women are more likely to engage in micro-enterprises since most of them are not employed, and because of their traditional role of home-making suits informal settings of micro-enterprises.
- People who are permanent residents of Nairobi are more likely to be in micro-enterprises than those who come for a temporary stay in Nairobi, because they have better business skills and are likely to have access to start-up capital.

3.4 Working definitions

For the purpose of this study micro-finance or credit was taken to be the provision of credit ranging between Kshs.1000 to Kshs.50,000. On the other hand, micro-enterprise are defined as those businesses employing between zero employees (self employed) and ten employees. They sometimes operate in 'grey' markets and are often run by people discriminated by race, gender or even location. They contain the majority of economically active, indigenous population, and provide the means of livelihood for the majority of the poor, especially in urban slums.

CHAPTER FOUR : EMPIRICAL RESULTS

In this section we present results of the analysis of survey data. We start with sample statistics followed by regression results. Table 5 shows means and standard deviations of the key variables used in the analysis.

Table 5: Sample statistics

Variable	Mean	Standard deviation
Micro-enteprise (1=own a micro-enterprise	.2420115	.4283114
Number of children born alive	1.261679	1.93704
Has primary education	.0859565	.2803064
Has secondary education	.0654793	.2473756
Has post secondary education	.0269537	.1619519
Has wage employment	.4138292	.4925304
Age in years	40.9809	8.681557
Agesq	1754.8	699.1433
Marital status(1=married)	.336017	.4724548
Religion	.0033335	.0576415
Sex(1=female)	.5571218	.4967382
Has second source of income	.0159055	.1251131
Source(1=micro-finance)	.0732416	.2605388
Location(1=permanent resident of Nairobi	.5683604	.4953166

Source: Own calculations based on Nairobi urban Integration survey data.

From the sample statistics in table 5, it can be seen that 24% of the sample are in micro-enterprises. With 76% the remainder being engaged in other activities. It is likely that the majority of these people would like to establish a small enterprise. but lack the resources to do so. Table 6 shows the correlations of ownership of a micro enterprise with certain socioeconomic characteristics of households.

Table 6: Correlation coefficients for selected variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
Own a micro-enterprise (1)	1												
Number of children born alive (2)	.25	1											
Has primary education (3)	-.17	-.18	1										
Has secondary education (4)	-.15	-.15	-.08	1									
Has post-secondary education (5)	-.09	-.06	-.05	-.04	1								
Has wage employment (6)	.66	.36	-.26	-.22	-.13	1							
Age in years (7)	.15	.34	-.08	-.07	-.02	.17	1						
Age squared (8)	.15	.34	-.08	-.07	-.02	.17	.99	1					
Marital status(1 if married) (9)	.24	.45	-.2	-.17	-.03	.34	.18	.18	1				
Religion(1=seikh, muslim or Akorino) (10)	-.01	-.02	.01	-.00	.01	-.00	-.07	-.06	-.01	1			
Sex(1=female)	-.14	.06	.00	-.01	.04	-.16	-.02	-.02	.01	.01	1		
Second source of income (11)	.13	.07	-.04	-.03	-.02	.11	.03	.03	.07	-.01	-.02	1	
Source of funds(1=micro-finance) (12)	-.13	.17	-.08	-.07	-.04	.33	.02	.02	.14	.01	.00	-.01	1
Location(1=permanent resident of Nairobi) (13)	.31	.34	-.21	-.14	.03	.37	.03	.03	.31	-.02	-.01	.08	.13

Source: Own calculations based on Nairobi urban Integration survey data.

The results presented in table 6 shows that with the exception of correlation between employment status and micro-enterprise, the correlation between all other variable is below 0.5. This indicates that the level of multicollinearity among the variables is relatively low and each variable captures a distinctive feature of access to micro-enterprise in our model. We therefore continue and regress enterprise ownership on all the variables in Table 6. All the explanatory variables in Table 6 are included in a regression equation which is used to estimate the effect of micro-credit on ownership of a micro-enterprise, controlling for effects of other factors. The results of the regression are presented in Table 7.

Table 7: Probability of Owning a Micro-Enterprise

Variable	Logit parameter estimates	Std.errors	Z-Values
Source of Funds(1=Micro-Finance)	18.62484	.6035146	30.861
Age	.2281715	.0331381	6.885
Agesq	-.0025927	.0004028	-6.437
Has Primary Education	-2.276507	.9056058	-2.514
Has Secondary Education	-1.22894	.3237995	-3.159
Has Post-Secondary Education	-.4343659	.3395877	-1.279
Has Wage Employment	5.532866	.1427463	38.760
Marital Status(1=Married) T	.1990475	.053662	3.709
Religion(1=Seikh, Muslim. Or Akorino)	-.3465824	.3896185	-0.890
Sex (1=Female)	-.1288575	.051621	-2.496
Number of Children Born Alive	.237511	.0143346	1.657
Second Source of Income	.6777718	.1467671	4.618
Location (1=Nairobi)	.8990318	.0611331	14.706
Cons	-1516976	.6878154	-22.055
Number of obs = 20999 Wald chi2(13) = 3823.05 Prob > chi2 = 0.0000 Log likelihood = -4881.4426	Pseudo R2	= 0.5799	

Source: Own calculations based on Nairobi urban Integration survey data.

The logit model was estimated using maximum likelihood estimation method. The dependent variable is ownership of micro-enterprise, which takes a value of one if a person owns a small business and a value of zero if otherwise.

4.1 Discussion of Results

Our main finding is that micro-credit increases the probability of owning a micro-enterprise. The coefficient of a micro-enterprise is positive and statistically significant. This is as expected from our hypothesis that micro-finance increases the likelihood of an individual entering into micro-enterprise sub-sector. The coefficient on sex was also found to be statistically significant, with a negative sign implying that women are more likely than men to enter into micro-enterprise. Location was also found to be positive and significant. This implies that those people who are located in Nairobi permanently are more likely to own a small business than those who are temporarily in Nairobi.

The regression results also indicate that the effect of age is statistically significanct with a positive sign, and that the coefficient of age squared is significant but with a negative sign. This means that access to micro-enterprise can be explained by a quadratic function of age. Up to a certain point, access to micro-enterprise increase with age and then it begins to decline. This may be due to the fact that after a certain age, people lose their managerial skills or sources of business capital. The effects of employment and marital status were found to be statistically significant with positive signs. The positive sign for the employment status implies that employed people are more likely to enter into micro-enterprise sub-sector than those who are unemployed. This could be explained by the fact that a small enterprise is a veblen good among the poor. That is, the poor attempt to distinguish themselves from their counterparts by setting of small business, which are a source of high social status. Moreover, the employed are more likely to have starting capital to provide self employment in micro-enterprise. The coefficient for marital status implies that married women are more likely to own a micro-enterprise relative to single women. This is contrary to expectations. This could be explained by the fact that the spouses of married women may be supporting them, in say, raising the starting capital and in encouraging such business decisions.

Effects of education, family size and religion were found to be statistically insignificant, with negative signs for education and religion and a positive sign for family size. Although insignificant, the coefficient for education implies that, those people who are educated are less likely to enter into micro-enterprise sub-sector probably because they have a chance of getting a wage job. As for the religion, though the coefficient is insignificant those people who are Seikh, Muslim or Akorino are less likely to enter into micro-enterprise relative to people of other religious (e.g. Protestant, Catholics). Measured by the number of children born alive family size has a positive effect on probability of owning a micro-enterprise. This could be explained by the fact that the more children one has the greater the burden to meet their basic needs and hence the greater the pressure to establish a small business so as to facilitate the meeting of those needs.

The coefficient for the alternative source of income was found to be statistically significant and positive. This implies that people with alternative source of funds are more likely to own a small business relative to people without such sources.

CHAPTER FIVE : SUMMARY, CONCLUSION AND POLICY RECOMMENDATIONS

This chapter summarises study findings and offers policy recommendations based on these findings.

5.1 Summary of Findings

The results of the analyses identify several factors that can help explain access to micro-enterprise sub-sector by the poor. In particular age, marital status, sex, employment status, alternative source of income, source of funds, and location had a significant effect on ownership of a micro-enterprise. Our objective in the study was to assess the role of micro credit in self employment in micro-enterprises in Nairobi. This objective was achieved through the use of a logit model in which the probability of owning a micro-enterprise was estimated, using micro credit as a predictor variable, controlling for effects of other relevant predictor variables such as sex, location and education.

Qualitative analysis has shown that micro-finance increases the probability of being in micro-enterprise sub-sector. Availability of micro-finance encourages ownership of micro-enterprises especially by married women. This is because most women are not employed, ie, they do not participate in labor markets as much as men do and also partly because traditionally most of the activities involved in micro-enterprises tend to suit woman better than men. It appears from the results that credit can be used to increase participation of women in small business sub sectors within in informal sector in Nairobi.

Contrary to the expectations, education of the entrepreneur has a negative effect on own business. As one becomes more educated, likelihood for owning a small business declines. This result conforms to the findings of Wahome and Ng'ethe (1987) who did not find education to be an important factor in business formation in the informal sector.

5.2 Conclusion

It was noted that participation in micro enterprises can play a key role in breaking the vicious cycle of poverty. Though the poor people are increasing in Nairobi by day, the government has failed to control this due to lack of a clear conceptualization of the solution to this problem. This study suggests policies that can be implemented to tackle this problem.

The study shows that availability of micro-finance is an important factor in helping address the problem of shortage of micro-enterprise opportunities among poor women.

By looking at specific attributes of micro-enterprises in the informal sector, it has been revealed that social-economic characteristics such as age and location play a big role in owning businesses in addition to the role played by micro-finance. The education level of an individual does not appear to be a significant determinant of participation in small businesses. However, the social value of education should not be underestimated, especially in reducing gender inequality, as it increases incomes of women. The study also revealed that those with a second source of income are more likely to start own businesses relative to those without such sources.

5.3 Recommendations

Since the analysis has revealed that micro-finance is a major determinant of participation in small businesses, it is recommended that credit be given with little or no collateral so as to make it available to the poor. The Kenya government therefore needs to support credit organizations that extend credit with minimal or no requirements for collateral. Moreover, the already operating credit organizations should be given conducive environment to operate, if they can demonstrate that they have the poor as their main clients. Though education was insignificant in exploring establishment of small businesses, primary education should be made broadly available to the poor because it is the basis for social and economic development.

The programme for micro enterprises in Nairobi should be improved through helping successive programmes with a proven track record to expand the activities to other urban areas. Socio-cultural pressure against businesses should also be checked, because certain religions were found to be a constraint on business ownership.

An arrangement should be made by the Kenya government through Nairobi City Council to make sure that security is provided to small businesses in the informal sector. Organized systems for paying licences should be implemented and this should not be overtaxed. Such systems will check police harassment of small businesses. Small businesses should also be covered with a legal framework that safeguards their rights and provides for skills acquisition at affordable rates.

5.4 Limitations of the study

One of the limitations of this study is the nature of the data collected. Though the data had observations of 20,999, the sample selected excluded individuals aged below 25 years and those above 54 years. Some of these people could be having their own businesses but have been excluded from the sample. Thus the results from the study are not generalizable to all age groups within the informal business sector in Nairobi.

We also had a methodological limitation in our study. This is because we made use of cross-section data which give information at a given point in time. This is a weakness because time series data could have revealed interesting aspects of dynamic ownership of small businesses, e.g. the factors determining their survival and growth.

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APPENDIX

SURVEY QUESTIONNAIRE (An abstract from the Main Questionnaire)
(The main questionnaire can be found from Institute of French Research in Africa (IFRA))

SOCIAL AND DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

1. Name of the respondent

2. Date of birth

3. Gender-Male
   -Female

4. Relation to the head of household

   -Head
   -Spouse
   -Son/daughter
   -Brother/Sister
   -Father/Mother
   -Other relative
   -Employee
   -NS/DK(not stated or don't know)

5. Marital status
   -Married
   -Never married
   -Staying together
   -Monogamy
   -Polygamy
   -Widow
   -Divorced
   -Separated
   -NS/DK (not stated or don't know)

6. Place of birth

7. What is your present nationality

8. When did you move in this resident

9. What was the location of this resident

-Nairobi
-Other urban Kenya
-Rural Kenya
-Urban abroad
-Rural abroad

10. What was your residential status at the beginning of this period when you moved in

-Housed
-Tenant
-Landlord

11. Education level

-Never went to school
-Attend now
-Left school

12. What was your level of education reached at the end of this period

-Primary
-Secondary
-High school
-Post secondary Education
-University

13. What was the highest certificate or degree you attained during this period when you left school

-None
-KCPE/CPE/KAPE/KPE
-KJSE
-KCSE/KCE/EACE/CSC
-KACE/EAACE/HSE
-Diploma/certificate
-Bachelor's degree
-Masters degree
-Other (specify)

14. What type of education establishment were you in-Public

-Private-religious
-Private non-religious

15. Labour participation

-Work for pay
-Leave/Sick
-Family/Own business
-Seek first job
-Seek job (worked before)
-Student
-Retired
-Incapacitated
-Homemaker
-Other (specify)

QUESTIONS FOR ALL EMPLOYED OR APPRENTICES

16. What was your main occupation or what was the trade/craft/profession that you were learning when you started this business?

17. What was your status during this period of activity

-Salaried
-Apprentice
-Family business
-Own business

QUESTIONS FOR OWN BUSINESS

18. How many employees/apprentices worked for you at the beginning of this period

-0 (self employed)
-1-2 persons
-3-5 persons
-6-10 persons
-more than 10

19. How many employees worked for you at the end of this period when you stopped business.

-0 (self employed)
-1-2 persons
-3-5 persons
-6-10 persons
-more than 10

20. How did you keep your accounts record-Personal book
-Formal Accountancy
-No written accounts

21. Was your company registered-Yes
-No

22. To set up this business what was the main source of finance you resorted to
-None
-Own savings
-Inheritance
-Family assistance
-Spousal support
-Merry-go-round
-Association
-Credit from suppliers
-Bank loan
-NGO loan
-Co-operative loan
-Personal loan
-Shylock
-Other (specify)

QUESTIONS FOR APPRENTICES AND FAMILY BUSINESS

23. How were you mainly supported during this period when you were in business.
-Older generations ralatives
-Younger generations ralatives
-Other relatives
-Manager/Boss
-Welfare
-Petty jobs
-Other (specify)

24. Did someone other than the members of the household help with the housework
-No
-Yes, not paid
-Yes, paid
-Don't know

25. During this period, did you have another source of income
-No
-Yes, regular
-Yes, occasionally

26. What was your second source of income (state the most important one if more than 2)

-Own business
-Relative's business
-Non-relative's business
-Properties income
-Other (specify)

27. When did you start this secondary activity

28. As compared to the preceding period, did you find that your income has.....

-Increased
-Decreased
-Remained the same

QUESTIONS ON FAMILY SIZE

29. How many children do you have?

30. How many are staying with you?

31. Other than your children, how many other people do you stay with?