THE IMPACT OF CREDIT ON SMALL ENTERPRISES GROWTH IN KENYA

THE CASE FOR NAIROBI.

Department of Economics

University of Nairobi.

RESEARCH PROJECT

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DECLARATION

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

JOSEPH OLUOCH ONYANGO

This research paper has been submitted for examination with our approval as University Supervisors.

Dr. Sule

Mr. Kabando.
DEDICATION

This study is specially dedicated to my son Brian and daughter Mishel and mother Angeline.
I wish to express my sincere gratitude to all that assisted me during the research period.

The patience of my children Brian and Mishel in the absence of their mother can not be forgotten. My heartfelt sympathy goes to my mother Angeline who received little assistance during my studies, my colleagues Kihara, Mayieka, Cheptarus and all that encouraged me during the trying moments. Lastly, I thank my supervisors Dr. Odhiambo Sule and Mr. Kabando for their endless guidance and correction of the work.
ABSTRACT

Economic hardship in Kenya led to many reforms and the focus of government policy is now on poverty eradication. Micro and small-scale enterprises is seen as the major area of job creation and elimination of the trend of poverty.

Majority of the unemployment consist of women and rural urban migrators who are mostly men. According to National Baseline Survey of 1999 more men than women are employed in Micro and Small-scale enterprises. Micro finance (the funds to finance small businesses) is vital for these firms' growth.

Expansion and growth of these firms will lead to more employment, higher standards of living and elimination of social evils. It is therefore imperative that funds are availed to the MSE sector for this objective to be realized.
**LIST OF ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSEs</td>
<td>Micro and Small Scale Enterprise</td>
</tr>
<tr>
<td>NBFI</td>
<td>Non-Bank Financial Institutions</td>
</tr>
<tr>
<td>CBK</td>
<td>Central Bank of Kenya</td>
</tr>
<tr>
<td>CMA</td>
<td>Capital Market Authority</td>
</tr>
<tr>
<td>NSSF</td>
<td>National Social Security Fund</td>
</tr>
<tr>
<td>KWFT</td>
<td>Kenya Women Finance Trust KWFT</td>
</tr>
<tr>
<td>IFC</td>
<td>Informal Financial Credit</td>
</tr>
<tr>
<td>RPED</td>
<td>Regional Program on Enterprise Development</td>
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CHAPTER I

1. INTRODUCTION

Small-scale enterprises are the seedbed of the future industrial development, which economists contend is the engine of economic growth and development. By 1979, the problem of unemployment in Kenya began to be felt and the main objective of the fourth national development plan (1987-93) was creation of employment opportunities and the major step to be taken was to promote the rural and informal sector enterprises. The sixth national development plan; 1989/93 under the theme "participation for progress" puts equal great emphasis on the need to take specific measures to ensure that the role attributed to the MSEs shall indeed be realised. The paper examines three broad areas in which change will need to be made to induce an acceleration of small-scale enterprise growth. These areas are enabling environment, investment and finance and non-financial promotional programs. The same is emphasized in other development plans.

According to sessional paper no.2 of 1996 on "industrial transformation to the 2002", near full employment can only be achieved during the period 1997-2020 if growth in employment averaged 4.3% annually.

The paper states that the phase one in development of core industrial sector is promotion of micro, small and medium scale industries, utilizing and adding value to local raw materials and acquiring relatively modest capital investment.

There is generally no accepted definition of small-scale enterprises. Some people use the asset base as the defining rod, some use turnover levels, some use the number of employees while others use some combination of the three criteria. For the purposes of this paper however the small-scale enterprises will be defined as comprising all businesses employing between zero and fifty workers (Charmes 1997, ILO 1993). The sector is highly heterogeneous in nature and conspicuously active both in the rural and urban areas of the economy. Similar activities tend to cluster together presumably taking advantage of agglomeration economies.

In Kenya, such enterprises are engaged in trade, commerce, distribution, transport agro business manufacturing and repairs and maintenance. They are mostly unregistered, and
unrecorded in official statistics and tend to have no access to organized markets and credit institutions or to many public services and amenities. They are not recognized, supported or acquired by government.

MSEs are typically found throughout the country while large firms tend to congregate in urban areas where services are best. Thus MSEs can help entrepreneurial base flourish among diverse ethnic groups and regions and among relatively low-income people in both urban and rural areas (Liedholm and Mead 1987, world bank 1996)

Kenya has over 1,289,012 micro and small enterprises nationwide employing nearly 2.5 million people, or 16% of the population of working age as shown in table 1.

Table 1 Total Number of MSEs and their employment.

<table>
<thead>
<tr>
<th>Stratum</th>
<th>% of Nat'l population</th>
<th>MSEs Number</th>
<th>%</th>
<th>Workers No.</th>
<th>%</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nairobi and Mombasa</td>
<td>9.7</td>
<td>204,280</td>
<td>15.8</td>
<td>394,838</td>
<td>16.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Other Major Towns</td>
<td>6.2</td>
<td>157,533</td>
<td>12.2</td>
<td>279,133</td>
<td>11.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Rural Towns</td>
<td>2.1</td>
<td>81,320</td>
<td>6.3</td>
<td>135,349</td>
<td>5.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>82.0</td>
<td>845,879</td>
<td>65.6</td>
<td>1,551,930</td>
<td>65.7</td>
<td>1.8</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>1,289,012</td>
<td>100.0</td>
<td>2,361,250</td>
<td>100.0</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Source: National MSE Baseline survey 1999 (CBS, K-Rep, and ICEG)

About 34% of the Kenya's MSEs are in the urban strata (Consisting) e.g. the first three strata of the table 1. Although Nairobi and Mombasa accounts for about 10% of the population they account for about 16% of the total number of MSEs and 17% at their total employment. While the density of MSEs is higher in the urban areas, the aggregate or relative number of MSEs is higher in the rural areas. The total number of workers in the table refers to the full time as well as part time workers in the MSEs sector. This consists of the owner or owners and family members, hired persons and apprentices.

*The number for both Part - time and casual workers have been normalized so that they reflect full - time equivalent labour units.
1.11 Sources of Credit to MSEs

Kenya currently has about 150 organizations with credit programs for MSEs; these organizations serve all regions of the country although there are more in the urban areas. The diversified financial system comprises the Central Bank (CBK), 23 Non bank financial institutions (NBFI), a post office savings bank, 5 building societies 39 insurance companies, 3 re-insurance companies, 10 development Financial institutions, a capital market (CMA) 20 security and equity brokerage firms and Stock Exchange Market, 2 advisory firms, 57 hire purchase companies, many pension funds, a social security fund(NSSF), 13 foreign Exchange bureau and 270 savings and Co-operative societies(National Development plan 1997 - 2002 Page 36 to 46).

Despite this range of financial institutions, financialiation of savings in Kenya is low. The share of domestic savings held as financial assets is estimated at about 30 per cent which is the same as in the mid 1970s. Financial assets as a share of GDP are about 6 percent, which is higher than elsewhere in sub-Saharan Africa but much lower than the average level for developing countries. The ratio of broad money (M2) which is used as a measure of monetirization of transactions is also relatively low (at 29 per cent). When the government instituted a credit squeeze in 1985-6 the fragile nature of these institutions was exposed. Four indigenous financial groups collapsed and this led to panic withdrawal from the other new institutions. By 1987, liquidity and insolvency was endemic within the NBFI subsector.

The government's response to this crisis was to strengthen the regulatory framework. Some of the key reforms introduced were;

a) A deposit protection fund (to cover deposits upto Ksh.100,000);

b) An increase in the minimum paid up-capital from ksh.2 million and Ksh. 10 million to Ksh.15 million and Ksh 150 million for locally and foreign incorporated banks respectively;

c) Limiting deposit mobilization capacity of any deposit taking institution to a maximum of 13½ times paid up capital and unimpaired reserves.

d) Mandatory provision for bad and doubtful debts to be made annually before approximating the year's profits;
e) Restriction of the shareholding of an individual to no more than 25 percent of the equity capital;
f) Making it mandatory for every loan to be adequately covered by collateral and where collateral cover is inadequate making the directors of the institutions personally liable for any bad debts arising form the loan.

These regulations had the potential of reducing lending to MSEs or making any such lending more expensive than it would otherwise have been.

For instance the introduction of a deposit protection fund paid for by the financial institutions means that, the costs of these institutions has to rise. They turn will attempt to recoup all or part of it from the borrowers and lenders. Since some of the borrowers are MSEs they will bear part of this higher cost. The extent to which the financial institutions are able to shift these extra costs to other parties will depend on the relative price elasticity.

An increase in the minimum paid-up capital of a financial institution restricts entry into the industry and leads to greater consecration. As the concentration ratio in Kenya's financial sector is already high the four largest institutions control the bulk e.g.deposits over 60 per cent. This increased concentration leads to an Oligopoly situation. When small financial institutions are allowed MSEs benefit because they can deal with firms of their size. Now they have to deal with very large financial firms and they face the danger of being marginalized.

Limiting the deposit mobilization capacity is another form of entry discrimination against small financial institutions and, by extension, against MSEs.

Restricting the shareholders of an individual financial institution may not be a restriction on entry in countries where there are very many wealthy or near wealthy individuals. However, in an economy like that of Kenya where the savings potential of the majority of people is very low, restricting shareholders is another form of limitation of entry into the financial sector. It is likely therefore, to have the same adverse effects on MSEs as the other forms of restrictions mentioned above.
Making collateral lending the only legal form of lending affects MSEs very adversely because many of them lack collateral and are therefore automatically excluded from the formal credit markets.

1.2 Informal financial Institutions

It has been argued that informal and formal modes of credit are not distinct spheres but interlocking parts of large and more complex networks of borrowing and lending (Charmes 1983).

In Kenya, the main source of informal credit is merchants, traders, shopkeepers/kiosk owners', relatives and friends and Rotating Savings and Credit Associations (ROSCAS) and commercial moneylenders.

Merchants, traders, shopkeepers/kiosks owners sell goods on credit to be paid later. Sometimes they sell goods off system for those with formal employment. Rotating savings and credit associations are groups of people who agree to make regular contribution to a fund, which is given in whole or in part to each contributor in rotation usually neighbors, friends, relatives or people working together. These organizations are also referred to as merry-go-round arising from turns taken in receiving the contributions until a complete round its reached by all members. They are remarkable for their wide distributions, variety of forms, functions and durability situations both of financial insecurity and of prospering industrialization: Those who participate in ROSCAS range from the illiterate poor to university professor and the rich. Friends and or relatives are also important source of informal credit. This can be in cash or kind. Commercial moneylenders are people who lend money at very high interest rates for a short period ranging from a day to one year. Most loans are for less than one month. In some countries like Ghana they are registered while in others they are not. In Kenya They are considered as illegal.

1.3 Demand and Supply of Credit

Several studies on the MSEs in Kenya have identified access to credit as a major problem affecting the growth of MSEs. Other studies concluded that while credit in the banking sector grew steadily in the past, a little of this credit reached the MSE sector (Kiiru 1991, Tomecko and Aleke Dondo 1992, Parker and Torres 1993, Daniel's et al. 1995, Oketch et
The 1993 Baseline survey showed that only 9% of the MSEs had accessed credit and that only 4% of this credit was obtained from formal financial institutions (NGOs), commercial banks, SACCOS etc. The survey noted that the bulk of MSE credit came from informal savings and credit associations (ROSCAS), friends and relatives. The 1995 baseline survey showed that 10.8% of the MSEs had accessed credit; of these only 3.4% received credit from formal sources.

Although Kenya has numerous organizations with credit programmes for MSEs, it is difficult to determine precise figures on credit extended to MSEs legal obligation to report them while some micro finance NGOs are reluctant to reveal their portfolios. Lack of this information is a serious handicap in the estimation of credit supply. However, various attempts have been made to estimate the volume of credit to MSEs. In 1991, it was estimated that between 1983 and 1990 organizations offering credit to MSEs had provided loans worth 2 billion (Aleke Dondo 1991).

More recent estimates of the volume or credit provided to 24 MSEs (Aleke Dondo and Ongile 1994) indicate that the amounts in 1990, 1991, 1992 were Ksh. 115 million, Ksh. 211 million and Ksh. 241 million respectively.

Tomecko and Aleke Dondo (1992) estimated that the outstanding portfolio of organizations providing credit to MSEs in July 1992 was Ksh. 1.05 billion. Oketch et al. (1995) estimated the supply of credit from 5 organizations in 1995 to be Ksh. 847 million. Although not indicating all organizations providing credit to MSEs, these estimates reveal that the credit volume to the sector has been increasing over time.

Table 2 shows that only 10.4% of MSEs have ever received credit from various resources. Overall, 89.6% of the MSE operators stated that they had never received credit, 2.8% reported having received loans from NGOs, 2.5% from ROSCAS 1.5% from commercial banks. It is clear from the data that Majority of Kenya's MSEs operates without any form of credit.
Table 2 Sources of Credit to MSEs (%)

<table>
<thead>
<tr>
<th>Source</th>
<th>1993</th>
<th>1995</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (no credit received)</td>
<td>85</td>
<td>89.2</td>
<td>89.6</td>
</tr>
<tr>
<td>Formal credit institutions including NGOs</td>
<td>4</td>
<td>3.4</td>
<td>5.7</td>
</tr>
<tr>
<td>Cooperatives</td>
<td>-</td>
<td>-</td>
<td>1.2</td>
</tr>
<tr>
<td>NGOs</td>
<td>-</td>
<td>-</td>
<td>2.8</td>
</tr>
<tr>
<td>Commercial Banks</td>
<td>-</td>
<td>-1.5</td>
<td>-</td>
</tr>
<tr>
<td>Government</td>
<td>-</td>
<td>-</td>
<td>0.2</td>
</tr>
<tr>
<td>Informal Institutions</td>
<td>5</td>
<td>7.4</td>
<td>4.7</td>
</tr>
<tr>
<td>ROSCAS</td>
<td>-</td>
<td>5</td>
<td>2.5</td>
</tr>
<tr>
<td>Family and Friends</td>
<td>-</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>Money lenders</td>
<td>-</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Trade Credit Supplies</td>
<td>-</td>
<td>-</td>
<td>0.6</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: National MSE Baseline Survey 1999 (CBS, K-Rep, and ICEG)

1.4 Statement of the problem

Small enterprise development is constrained by factors such as inappropriate environment, particularly inadequate infrastructure, inappropriate technology, inadequate capital, limited market and credit accessibility.

Since entrepreneurs of the informal sector are unlikely to belong to high income households and may have low savings to use as start-off capital, studies have observed that most of these entrepreneurs use their own savings as startup capital (Syagga, Gatabaki, Ondiege 1989's; Aleke-Dondo, 1989; Mutua and Aleke - Dondo 1990; Ondiege 1992).

This has led to the establishment of micro-finance credit institutions such as the K-rep bank, FAULU KENYA, KWFT etc. Despite the constraints in Economic performance and high interest rates occasioned by the liberalized financial markets, the impact of credit is clearly evident in increased levels of employment, sales, profits and savings. Credit beneficiaries have been able to expand their capital base and possibly market area.
due to increased capital value base and are therefore capable of making significant progress.

There is therefore need for increasing credit accessibility and mobilization of savings to avail more capital to MSEs for faster growth and development. Survey studies carried out in Nairobi, Mombasa and Kisumu (Ondiege, and Aleke - Dondo, 1991) proved that those enterprises that successfully applied for credit were performing better than those that failed to secure credit. Therefore, for optimal financial resource allocation informal financial institutions and markets need to be given necessary consideration in policy design.

It is inevitable that we assess the impact of credit on the SMEs and scrutinize the determinants of credit accessibility on the growth of this sector especially in the urban Set-up where the infrastructure is developed.

1.4 Objectives of the study

The main objective of this study is to assess the impact of credit on the small enterprise growth. Specifically the study will;

1) Identify the sources of Credit to MSEs
2) Formulate and estimate a growth model based on firm performance data.
3) On the basis of (1) to (3) make conclusions and policy recommendations regarding small-scale enterprises credit and the determination of their success.

1.5 Significance of the Study

For sustainable economic growth the provision of credit has been regarded as an important tool for raising the incomes of the urban poor, mainly by mobilizing resources to more productive uses. The generation of self-employment in non-farm activities requires investment in working capital. However, at low levels of income, the accumulation of such capital may be difficult. Under such circumstances, loans, by increasing family income, can help the poor to accumulate their own capital and invest in employment generating activities (Hussein, 1998). Thus by looking at the impact of credit on MSEs, it will help policy makers to improve on their decision making and
establish the extent to which this sector can help generate employment opportunities to
the country.

A 1995 survey of small and micro enterprises found that up to 32.7% of the entrepreneurs
surveyed mentioned lack of capital as their principal problem, while only about 10% had
ever received credit (Daniels et al., 1995). Nonetheless formal financial institutions have
created the myth that the poor are not bankable since they can't afford the required
collateral and are considered uncredit worthy (Adera, 1995). Hence despite efforts to
overcome the widespread lack of financial services, especially among small holders in
developing countries, and the expansion of credit in the urban areas of these countries,
the majority still have only limited access to bank services to support their private
initiatives.

The study will increase empirical literature on credit mobilization in Kenya's informal
sector. Previous studies have focused on national, private or household savings
1990). The study is different in that other studies have focused on FFS (Formal Financial
Savings) while this study is on IFC (Informal Financial Credit).

Experience from informal finance shows that the rural poor especially women, often have
greater access to informal credit than to formal sources (Hassain, 1988; Schrieder and
Cuevas, 1992; Adams, 1992). The same case has also been reported by surveys of credit
markets in Kenya (Raikes 1989; Alila, 1991; Daniels et al, 1995). However, there has
been lack of an empirical analysis on the relationship between lending policies and the
problem of access to credit. This study is aimed to fill this gap.
2.0 LITERATURE REVIEW

The literature review on this study focuses on studies done both in developed and developing countries on small and micro-enterprises. This study aims at analyzing the effect of credit on firm growth along side other determinants.

Daniels, Mead and Musinga (1995) in their study of Kenya found that only small minority MSEs have benefited from any form of credit or non-financial assistance. They found that most enterprises primarily rely on own savings and reinvested profits to finance their enterprises. This is consistent with the study of House (1977, 1981, 1984) whose study of Nairobi’s informal sector found that the performance of MSEs in Nairobi is influenced by the amount of capital growth since business opened, the number of sub-contracts, number of workers, ratio of capital employed to annual output, ratio of capital employed to workers, amount of loan, number of hours worked per day and whether business is retailing or not. The results from this study found that these factors explain 33% of the variation in net income of the businesses. However, he found that age, education and experience are not significant. But in this study we expect them to be significant.

Several informal sector studies stress the need for improved informal sector financing. By implication they accept the existence of a desired level of capital: Abuodha (1989). This implies that informal sector entrepreneurs cannot finance investments with their respective firms. Credit is needed to finance the difference between actual savings and desired level of savings. Both the Rural informal sector as well as the urban informal sector finances most of their investments from agricultural incomes (Ngethe N., Wahome J, and Ndua G; 1987 pg 75) Accepted sources of financing investments by most papers in the informal sector area financing from profits, b) financing from agricultural profits c) gifts and loans from spouses and relatives d) to a limited level loans from agencies. Most studies concur that profits and savings are the main source of financing business investments. (Abuodha, 1989 pg 37)
However, analysis undertaken by researchers using the RPED data look at access to finance across different ethnic groups in Kenya (Biggs and Raturi, 1997; Raturi and Swamy 1997; Fafchamps, 1996). Biggs and Raturi find that belonging to an ethnic minority in Kenya does not affect access to formal sources of credit like overdraft facilities, but does affect access to supplier credit. They conclude that the flow of information and contractual enforcement mechanisms explain greater access to credit by members of ethnic minority groups.

A large and growing number of recipients of micro enterprise credit are women. (Inter-American Development Bank, 1997). For example, female entrepreneurs comprise 93% of the Grameen Bank’s current portfolio of 1.2 million borrowers, an increase from 39% in the early 1980s. In Canada for example, the number of female entrepreneurs tripled during 1976 – 1994 (Cohen, 1996). Such that today women account for one in three entrepreneurs in the Canadian economy. Other studies confirm the increasing "feminization" of self-employed informal sector. Berger (1989) estimates that women own and operate roughly one third of all informal sector businesses.

Goetz & Gutpa, 1995 argue that the rising proportion of female borrowers in credit program is due to issues of economic growth. They argue that the NGO - dominated micro enterprise credit has often specifically sought to address issues of women’s empowerment in developing countries. Recent studies have shown that access to credit industry has often specifically sought to address issues of women’s empowerment in developing countries. Recent studies have shown that access to credit degenerate a form of economic empowerment, which can greatly enhance a woman’s self-esteem and status within the family.

In addition, many NGOs and other development institutions prefer to direct credit toward women since credit given to women has greater impact on household welfare than credit directed toward male borrowers.

Jiggins (1989) for example portrays the female enterprise as an institution whose primary purpose is to ensure subsistence consumption for members of the household in contrast to male enterprises, in which reforms are often higher, but more risky.
Little (1987) found education of the entrepreneur to be of value in explaining profitability and growth. Page (1979) also considered formal Education attainment as a factor in explaining entrepreneurial success. Other studies however find no such relationships. Studies relating formal education and business success have consistently found weak and negative relationships (Harris 1971, child 1977, Kilby 1969). At the same time functional literacy has been found to be positively correlated with profitability of small scale firms (Aryee 1976, Olkanpo 1968). Little, Mazumdar and page (1987) suggest that the explanation of this weakness might be that formal education is competitive with learning on the job, particularly for Africa. Their results of an Indian study showed that, Education beyond functional level was a significant positive factor for growth and profitability.

Cartes Berry and Ishaq (1987) found that the success of the firm as defined by benefit-cost ratios was significantly related to Education and skills. They argued that university educated entrepreneurs employ a wide range of techniques whereas entrepreneurs with only elementary education tend to choose the simplest techniques. This can certainly have an effect on performance and growth.

Other studies agree on the fact that education is rare among the small-scale entrepreneurs (Nzomo 1986, Leidholm and Mead 1989). This may act as a constraint to the success of the entrepreneur as it isolates him. Although there is actual evidence on the relationship between the level of education and successful management of small scale enterprises the reaction on this issue is mixed (Chuta, 1989). Despite this most studies have found positive, though weak relationships. In Kenya Education may not be a major factor given that it has been established that most of the entrepreneurs are primary school leavers whose level of education may not have a great impact on the profits (Wahome and Ngêthe 1987). Majorities of these entrepreneurs are apprentices whose level of education is very low and yet are successful. This implies that it is the training that one gets and not his education that has an effect on firm performance.
Capital shortages are yet another factor given prominence by studies. ILO (1972) and Nzomo (1986) identify capital shortages as a major constraint. Availability of capital can be closely related to the availability of credit facilities. This is cited by Marris and Somerset (1971) as a major difficulty faced by entrepreneurs in starting businesses. The same view is held by Cortes, Berry and Ishaq (1987). They argue that access to a particular source of finance is probably as much a consequence as a cause of a small enterprise success. Kilby (1982) also agrees with the latter by citing lack of cash and working capital as some of the major handicaps in small scale enterprises and argues that capital labour ratio is a good yardstick for factor intensity and a determinant of economic efficiency. Morris and Somerset (1971) agree with the rest that some of the problems that Africans face in entering business are capital, working capital and lack of knowledge and training in business management.

Macormick (1988) treats capital accumulation as profits ploughed back into the enterprise and connects this with the success of business. This is supported by Chuta in his 1974 survey in Sierra Leone when he argues that firms enter business to make profits and cites shortages of capital and lack of demand as problems facing small scale enterprises, in addition to poor management and poor quality skills. We can conclude that capital be it working capital, initial capital, credit facilities or cash contribute to explain the business profits and growth.

Problems of access to raw materials is a bottleneck to the growth of small producers and is particularly emphasized by Gerry (1974, 1978) in his work on the petty production in Dakar, Senegal. He found that in the shoe production the small producers had to switch from the use of leather to synthetic materials since a multinational shoe company was able to achieve a virtual monopoly in the purchase of fine (imported?) leather and had received considerable government protection. The main importer of synthetic materials then tried to "re-organize" the small producers using his own capital and marketing outlets, albeit without success. Child (1973) in an empirical study of small-scale enterprises identified lack of raw materials at affordable prices as an important determinant of good performance. Also important is the quality of raw materials. Poor
quality may lead to poor products that may lack markets. This is a vital input into the enterprise without which the enterprise may not operate.

House Kabagambe and Green (1973) suggest that small enterprises serve low-income earners. This implies that their products are inferior goods. For that matter their location is in low-income areas indicating their market orientation. They further suggest that formal sector incomes determines the extent of the market. Child (1973) has similar view that the market for small scale manufactured products is limited to domestic low-income earners. He is emphatic that these products would not even sell to high-income earners in Kenya let alone elsewhere. According to him these products are 'simply designed, crudely constructed and roughly finished' thus offending the aesthetic values of high-income consumers and rendering them inferior goods.

In a later study on the role of the intermediate sector employment technology and growth, Child (1976) states that the allocation of scarce budgetary resources to small-scale industry can best be measured by the demand response. He agrees with Harper and Aboagaye that small enterprises are in dire need of an effective marketing strategy. The view that low-income earners are the major consumers of products from small-scale enterprises is supported by the results of Ng'ethe and Ndua's study (1984). They found that in total the low-income group constituted 52.61% of the clients, middle income group 30.64% and the high-income group 16.75%.

Leys (1973) also implies that informal sector products are inferior goods. He attributes this to the influence on consumer tastes by conspicuous consumption of the rich and advertising. He consequently notes that any substantial increase in the income of the lowly paid ("working poor") would increase demand for formal rather than in the formal sector.

Contrary to some of the above suggestions Lee (1975) states that only a small proportion of goods purchased by low income earners are from the informal sector. He concludes that low income earners cannot provide an expanded market for the informal sector. He proposes that high income groups should be the target for expanding the market on condition that the quality is improved. Lee therefore implies that these products are of
poor quality. He adds that intermediate goods would provide the greatest scope for increased demand.

Page (1979) has used the age of the enterprise to capture the experience of the owner. The same has been done by Mcormick(1988) where she found that in general higher rates of profitability are observed for older firms. Chuta and Liedholm (1985) in their model used experience as an explanatory variable. They argue that entrepreneurs with greater experience would be expected to earn higher economic profits than those with fewer years of experience. In their findings experience had a positive and significant coefficient at 5% level. They concluded that years of experience has a very important bearing on the entrepreneurial success. Child (1973) in an empirical study of small-scale enterprises found lack of experience to be a major constraint among other factors he considered. Prior occupation of the owner and experience are treated by HO(1980) as factors affecting performance and firm growth. Harris (1969) goes further to include ethnic group membership and political involvement as factors affecting profitability in addition to others cited above. Though this is not the case for the Kenyan MSEs.

Several informal sector studies stress the need for improved informal sector financing. By implication they accept the existence of a desired level of capital Abuodha,(1989). This implies that informal sector entrepreneurs cannot finance investments with their earnings from their respective firms. Credit is needed to finance the difference between actual savings and desired level of savings. Both the Rural informal sector as well as the urban informal sector finances most of their investments from agricultural incomes (Nge'the N, Wahome J and Ndua G; 1987 pg 75). Accepted sources of financing investments by most papers in the informal sector area) financing form profits, b) financing from agricultural profits c) gifts and loans from spouses and relatives d) to a limited level loans from agencies. Most studies concur that profits and savings are the main source of financing business investments (Abuodha, 1989 pg 37)

Leff, 1979 argues that minority entrepreneurs are better placed as they have a lot of influence on firm performance. This is confirmed by the study of Kenyan capitalists which provides interesting anecdotal evidence particularly regarding entrepreneurs of Asian descent ( Himbara, 1994). Himbara argues that Asian entrepreneurs in Kenya
gradually built an extensive network of large enterprises in several different industries that fueled the growth of the private sector throughout the twentieth century. He argues that collective efforts through industrial associations such as the federation of Indian chambers of commerce of Eastern Africa and the Association for the promotion of industries in East Africa headed by prominent industrialists of Asian descent were instrumental in formulating policies that helped to generate growth in the private sector.

2.1 Overview of the literature
The literature reviewed above focuses on studies assessing how different factors affect firm growth as measured by change in employment in both developed and developing countries. Several informal sector studies stress the need for improved MSE financing and by implication they accept the existence of a desired level of capital (Abuodha, 1989). This implies that informal sector entrepreneurs cannot finance investments with their earnings from their respective firms. Credit is needed to finance the difference between actual savings and desired level of savings. While some studies e.g Kilby (1982); Maris and Somerset (1971) agree that capital is a yardstick for firm growth, other studies stress the importance of other determinants such as Education, raw material, sex of the entrepreneur, market for final goods, good management practices, age of the firm, minority entrepreneurship and previous experience of the entrepreneur.

The over riding fact in the literature is the fact that credit is an important determinant of MSEs growth. It can influence performance positively or negatively depending on usage, amount, and environmental factors surrounding the MSEs. In our study credit is used to establish increase in growth and employment. Our study differs from other studies in the sense that firm growth will be measured using employment as well as initial firm size as dependent variables. Previous studies have used profit that may not be very realistic as most entrepreneurs give estimates that are far below realities. Previous studies do not measure firm growth. Instead they explain how different factors affect firm’s growth.
CHAPTER III

METHODOLOGY

3.1 Introduction

This chapter presents the model specification dependent variables and the estimation procedures used. Data sources and limitations of the study have also been indicated. Many surveys on formal and informal credit in Kenya have been qualitative in nature (Raikes, 1989; Alila, 1991; Aleke Dondo 1994; Daniels et al, 1995). Our study will use both qualitative and quantitative literature.

3.2 Model Specification

The study will use a model developed by Vijaya and Manju (2001) in a survey of firm growth in seven African Countries; Ghana, Kenya, Zimbabwe, Tanzania, Zambia, Cameroon and Côte d’Ivoire. The model tries to capture the relationship between firm growth due to credit provision. Vijaya and Manju (2001) used the model to compare firm growth of minority entrepreneur firms and indigenously owned African firms. Our study however, will use the model to establish whether credit is a significant determinant of firm growth.

Just like Vijaya and Manju our model includes credit alongside other entrepreneurial variables such as education level. Manju and Vijaya found that non–African firms enjoy a higher rate of firm growth due to the advantages of being minority, such as access to informal networks, credit and informal contractual mechanisms.

We shall use the approach and try to investigate why firms that have access to credit tend to grow faster than their counterparts and establish the change in employment levels of such firms due to provision of credit.

Growth is calculated using employment rather than turnover data as it has been in other studies. This can be more reliable since most firms are able to provide recall employment data but not sales due to fear of victimization of sales tax.

The learning mechanisms that we control for includes whether the entrepreneur has education or not and previous experience of the entrepreneur. We include two variables
that are somewhat indirect learning mechanisms - whether the entrepreneurs' family is in
the same business and whether the entrepreneur owns another business concurrently.
The first sets of regressions are run with the pooled sample. We then disaggregate the
sample into enterprises run by male and female entrepreneurs in order to test for
determinants of firm growth across these two types of firms. Finally, employment as
well as initial firms size as dependent variables. The basic econometric model is
described below;

\[
Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_n X_n + \epsilon
\]

Where: \(Y\) = Change in employment. \(= (L(t) - L(0))

\[= (\ln L(t) - \ln L(0))
\]

\[= (a)
\]

\[
\begin{align*}
L_C & = \text{Current employment} \\
L_i & = \text{Initial employment} \\
a & = \text{age of the firm} \\
X_1 \text{ to } X_3 & = \text{Sector dummies} \\
X_4 \text{ to } X_5 & = \text{Experience of the entrepreneur (dummies)} \\
X_6 \text{ to } X_7 & = \text{Education dummies} \\
X_8 \text{ to } X_n & = \text{Concurrent business ownership} \\
X_{10} & = \text{Credit amount}
\end{align*}
\]

In regressions estimating the determinants of initial firm size, a measure of assets owned
by the entrepreneur is included to test the hypothesis that the wealth of the entrepreneur is
positively correlated with the size of the firm established by the entrepreneur.
EXPLANATORY VARIABLES:

(1) **AGEFI:** = age of the firm
(2) **CREMO** = Credit amount
(3) **CALARA** = Capital Labour Ratio
(4) **REX** = Relevant experience dummy, where;
   REX 1 = Experienced entrepreneur, REX 0 = Not experienced
(5) **ED** = Education dummy - where
   ED 0 = No education  ED1= educated
(6) **COBE** = Concurrent business ownership dummy where
   COBE 0 = No concurrent business owned, COBE 1 = Concurrent Business owned
(7) **SEEN** = Sex of the entrepreneur dummy where
   SEEN 0 = Female  SEEN 1= Male
(8) **ENTER** = Type of Enterprise Dummy Where
   ENTER 1 = Trade Industry, ENTER 2 = Service Industry, ENTER 3 = Manufacturing industry
(9) **Ln(Li)** = Natural log of initial employment
(10) **Ln (Lc)** = Natural log of current employment.

In estimating the model, we use the interaction terms whereby, the model common slope coefficient and common intercept and one of the dummies is dropped from each category to avoid the problem of linear dependency. Hence in interpretation of the results, we interpret the dummy variable effects in relation to the dummy variable that was dropped in each category.

The dummies dropped include:
1. REX 0 = No experience dummy
2. ED 0 = No education dummy
3. COBE 0 = No concurrent business dummy
4. SEEN 0 = Female dummy
5. ENTER 1 = Trade industry dummy.
\[ Y = \beta_0 + \beta_1 \text{CREMO} + \beta_2 \text{CLARA} + \beta_3 \text{REX1} + \beta_4 \text{ED1} + \beta_5 \text{COBE1} + \beta_6 \text{SEEN1} + \beta_7 \text{ENTER2} + \beta_8 \text{ENTER3} + \epsilon \]

Where \( \epsilon \sim N(0, \sigma^2) \) i.e. assumed to be normally distributed with zero mean and constant variance.

### 3.4 Hypothesis

The expected signs of coefficients of the independent variables based on findings of studies in the literature review are shown below.

**TABLE 3 Expected signs of the estimated coefficients**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Expected sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit amount</td>
<td>Positive</td>
</tr>
<tr>
<td>Age</td>
<td>Positive</td>
</tr>
<tr>
<td>Education</td>
<td>Positive</td>
</tr>
<tr>
<td>Ownership status (1=own and 0 otherwise)</td>
<td>Positive or negative</td>
</tr>
<tr>
<td>Relevant experience</td>
<td>Positive</td>
</tr>
<tr>
<td>Sex</td>
<td>Positive or negative</td>
</tr>
<tr>
<td>Labour -Capital ratio</td>
<td>positive</td>
</tr>
</tbody>
</table>

Based on the literature reviewed, it is hypothesized that those enterprises with loans are bound to perform better than enterprises without loans. Performance also improves as the number of loans increase.

We also expect age of the entrepreneur to be positively related to profitability. This is because older entrepreneurs may possess more business experience leading to higher profits. In our study, education is taken to be the number of years of formal education. The more years of formal education the more educated a person. Studies show that profitability is positively related to education.

Relevant experience is measured by the number of years an enterprise owner has been in the present business. It is expected that business run by entrepreneurs with more years of experience are more profitable. It is hypothesized that entrepreneurs who have good
business management practices, just as outlined in the literature, are likely to be successful that those who don't. The literature does not clearly show how the types of enterprise affect the performance of an enterprise. Hence it is our task to determine the sign.

3.5 Data Sources
Primary data was collected through stratified sampling of 240 MSEs in Nairobi. This was distributed to manufacturing, trade and service sector. The region was divided into eight smaller administrative zones or trading blocks. These were Embakasi, Kasarani, Starehe, Dagoreti, Makadara, Westlands, Langata, and Pumuani divisions. 10 MSEs were selected by writing 30 names of MSEs in each division in a piece of paper and randomly selecting one after every three.

3.4 Limitations of the Study
Some of the important determinants in growth of MSEs may not be included such as political and environmental policies. Loans received may not be entirely used for intended purpose and instead diverted to other uses. This may reduce the effects of credit on the growth of the enterprises. Time was too short to cover the area of study. The constant reallocation and demolition of SME business structures also contributed to poor performance of the enterprises.
CHAPTER IV
RESULTS OF THE STUDY

Table 4: DESCRIPTIVE STATISTICS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>y</td>
<td>-0.2877</td>
<td>1.099</td>
<td>0.11</td>
<td>0.02</td>
<td>0.22</td>
</tr>
<tr>
<td>ln lc</td>
<td>1</td>
<td>21</td>
<td>6.23</td>
<td>0.57</td>
<td>5.08</td>
</tr>
<tr>
<td>a</td>
<td>0</td>
<td>2.485</td>
<td>0.88</td>
<td>0.07</td>
<td>0.58</td>
</tr>
<tr>
<td>CLARA</td>
<td>1342</td>
<td>6532</td>
<td>3409.78</td>
<td>145.61</td>
<td>1302.34</td>
</tr>
<tr>
<td>CREMO</td>
<td>25000</td>
<td>650000</td>
<td>347280.00</td>
<td>19000.28</td>
<td>169943.64</td>
</tr>
<tr>
<td>COBE1</td>
<td>0</td>
<td>1</td>
<td>0.16</td>
<td>0.04</td>
<td>0.37</td>
</tr>
<tr>
<td>ED1</td>
<td>0</td>
<td>1</td>
<td>0.89</td>
<td>0.04</td>
<td>0.32</td>
</tr>
<tr>
<td>ENTER2</td>
<td>0</td>
<td>1</td>
<td>0.38</td>
<td>0.05</td>
<td>0.49</td>
</tr>
<tr>
<td>ENTER3</td>
<td>0</td>
<td>1</td>
<td>0.24</td>
<td>0.05</td>
<td>0.43</td>
</tr>
<tr>
<td>REX1</td>
<td>0</td>
<td>1</td>
<td>0.46</td>
<td>0.06</td>
<td>0.50</td>
</tr>
<tr>
<td>SEEN1</td>
<td>0</td>
<td>1</td>
<td>0.49</td>
<td>0.06</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Source: own survey

From the statistics, we get the means and standard derivations of the variables of estimation. Y shows a minimum value of a negative showing that some of the firms have reduced rather than grown over the periods while the highest growth is found to be 1.099. Capital labor ratio has a mean standard error of 146 while credit has a mean standard error of 19000.

Table 5: AGE CLASSIFICATION

<table>
<thead>
<tr>
<th>Age of the firm</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>32</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>4-7</td>
<td>23</td>
<td>28.75</td>
<td>68.75</td>
</tr>
<tr>
<td>8-11</td>
<td>11</td>
<td>13.75</td>
<td>82.5</td>
</tr>
<tr>
<td>12-15</td>
<td>8</td>
<td>10</td>
<td>92.5</td>
</tr>
<tr>
<td>16-19</td>
<td>4</td>
<td>5</td>
<td>97.5</td>
</tr>
<tr>
<td>20-23</td>
<td>2</td>
<td>2.5</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: own survey

Most of the firms (about 40% have operated for 1 - 3 years while 29% for 4 - 7 years. This implies that many MSEs have been in operation for 7 years or less. Only 2.5% of
the sampled 80 firms have operated for over 20 years. As age of the firm directly determine the amount of credit, only 25% were expected to record highest growth.

Table 6: CAPITAL LABOR RATIO CLASSIFICATION

<table>
<thead>
<tr>
<th>Capital range</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;=1500</td>
<td>2</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>1501-3000</td>
<td>35</td>
<td>43.75</td>
<td>46.25</td>
</tr>
<tr>
<td>3001-4500</td>
<td>27</td>
<td>33.75</td>
<td>80</td>
</tr>
<tr>
<td>&gt;=4501</td>
<td>16</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: own survey

Shows the distribution capital – Labor (K-L) ratio for the sample. Most of the firms, about 35% have a K-L ratio of between 1501 to 3000, 27% have between 3000 to 4500. Only 16% of the firms have a K-L ratio of more than 4500 while 2% have 1500 or less.

Table 7: CLASSIFICATION OF CREDIT AMOUNT

<table>
<thead>
<tr>
<th>Credit amount</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;250000</td>
<td>25</td>
<td>31.25</td>
<td>31.25</td>
</tr>
<tr>
<td>250001-400000</td>
<td>26</td>
<td>32.5</td>
<td>63.75</td>
</tr>
<tr>
<td>400001-500000</td>
<td>22</td>
<td>27.5</td>
<td>91.25</td>
</tr>
<tr>
<td>550000+</td>
<td>7</td>
<td>8.75</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: own survey

On credit distribution, 32.5% have a credit base of 25,000/= to 400,000/= while 31.24% have a credit base of less than 250000/.= These comprise of over 60% of the firms. 27.5% of the firms have credit of 40,0001/= to 55,000/= while only 8.75% of the sample firms have a credit of over 550,00/= . These amounts consisted of the totals for all the duration of firm operation meaning that many firms had very little credit base to operate with.
From the table, employment in trade and service sectors does not vary much. 8 firms in trade employ 1 person while 3 firms in both manufacturing and service employ that number. Most of the MSE employ between 2-3 people (i.e. 47 of them) with the highest number of firms coming from trade, i.e. 22. 12 firms employ between 4-5 people with the distribution being 1,9 and 2 in trade, service and manufacturing respectively. Only 1 firm that is in the service sector has 12 employees or more, while only 2 manufacturing firms have between 10 and 11 employees. This implies that most MSEs are a one-person business with the assistance of family members and close acquaintances. Most MSEs also engage in trade activities as capital required to start these business are small compared to manufacturing and service sectors. Bureaucratic procedures involved also hinder growth of these firms.
Table 9: THE RELATIONSHIP BETWEEN THE AGE OF THE FIRM AND CREDIT ACQUIRED

<table>
<thead>
<tr>
<th>Credit amounts</th>
<th>&lt;250000</th>
<th>250001-400000</th>
<th>400001-550000</th>
<th>550000+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of the firm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3</td>
<td>22</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>4-7</td>
<td>3</td>
<td>11</td>
<td>8</td>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td>8-11</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>12-15</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>16-19</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>20-23</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>26</td>
<td>22</td>
<td>7</td>
<td>80</td>
</tr>
</tbody>
</table>

Source: own survey

Out of the 80 firms, most of them, over 50% received credits of less than 400,000/=, while only 7 received credits of over 550,000/=.

Most of the firms that received credits of 250,000/= or less have operated for 1-3 years. They accounted for 22 out of 35 firms.

The distribution of credits of higher amounts was evenly distributed for firms that had operated for more than three years.

<table>
<thead>
<tr>
<th>Age of the firm</th>
<th>&lt;=1500</th>
<th>1501-3000</th>
<th>3001-4500</th>
<th>=&gt;4501</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>2</td>
<td>11</td>
<td>11</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>4-7</td>
<td>0</td>
<td>10</td>
<td>9</td>
<td>4</td>
<td>23</td>
</tr>
<tr>
<td>8-11</td>
<td>0</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>12-15</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>16-19</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>20-23</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>35</td>
<td>27</td>
<td>16</td>
<td>80</td>
</tr>
</tbody>
</table>

Source: own survey

Most firms have a Capital Labour(K-L) ratio of between 1500 and 4500. This range of K-L ratio presents most of the firm’s distribution that had been there for 4-7 years. 10 out of 23 have a K-L ratio of 1501 – 3000, while 6 of the firms that have operated for 8-11 years have this K-L ratio range. Out of 80 firms, 27 that have operated for 8-11 years have K-L ratio range of 3000 to 4500.

Correlation matrix

The table below represents the correlation matrix of the dependent and the explanatory variables. From the correlation matrix, we find no serious problem of multicollinearity of the independent variables and amongst themselves or with the dependent variable. From this table, age of the firm is highly positively correlated with the credit amount. This may be due to the fact that the older firms must have acquired more credit. The growth of firms is
<table>
<thead>
<tr>
<th></th>
<th>y</th>
<th>ln_lc</th>
<th>a</th>
<th>CLARA</th>
<th>CREMO</th>
<th>COBE1</th>
<th>ED1</th>
<th>ENTER2</th>
<th>ENTER3</th>
<th>REX1</th>
<th>SEEN1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>y</td>
<td>1.000</td>
<td>-0.012</td>
<td>-0.275</td>
<td>0.091</td>
<td>-0.368</td>
<td>-0.259</td>
<td>0.139</td>
<td>-0.037</td>
<td>0.079</td>
<td>-0.069</td>
<td>-0.078</td>
</tr>
<tr>
<td>ln_lc</td>
<td>-0.012</td>
<td>1.000</td>
<td>0.455</td>
<td>-0.101</td>
<td>0.247</td>
<td>0.567</td>
<td>0.117</td>
<td>0.261</td>
<td>0.094</td>
<td>0.139</td>
<td>0.010</td>
</tr>
<tr>
<td>a</td>
<td>-0.275</td>
<td>0.455</td>
<td>1.000</td>
<td>-0.203</td>
<td>0.706</td>
<td>0.330</td>
<td>0.181</td>
<td>0.099</td>
<td>-0.037</td>
<td>0.143</td>
<td>-0.133</td>
</tr>
<tr>
<td>CLARA</td>
<td>0.091</td>
<td>-0.101</td>
<td>-0.203</td>
<td>1.000</td>
<td>-0.056</td>
<td>-0.247</td>
<td>0.072</td>
<td>-0.225</td>
<td>0.257</td>
<td>0.000</td>
<td>0.052</td>
</tr>
<tr>
<td>CREMO</td>
<td>-0.368</td>
<td>0.247</td>
<td>0.706</td>
<td>-0.056</td>
<td>1.000</td>
<td>0.105</td>
<td>0.107</td>
<td>-0.032</td>
<td>0.060</td>
<td>0.147</td>
<td>-0.081</td>
</tr>
<tr>
<td>COBE1</td>
<td>-0.259</td>
<td>0.567</td>
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<td>-0.247</td>
<td>0.105</td>
<td>1.000</td>
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<td>0.194</td>
<td>-0.266</td>
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<td>0.174</td>
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<td>ENTER3</td>
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<td>-0.037</td>
<td>0.257</td>
<td>0.060</td>
<td>-0.007</td>
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<td>-0.432</td>
<td>1.000</td>
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<tr>
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<td>-0.069</td>
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<td>1.000</td>
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<td>SEEN1</td>
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<td>0.189</td>
<td>0.174</td>
<td>-0.074</td>
<td>0.098</td>
<td>1.000</td>
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<td>Sig. (1-tailed)</td>
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<td>0.000</td>
<td>0.150</td>
<td>0.010</td>
<td>0.204</td>
<td>0.109</td>
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<tr>
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<td>0.000</td>
<td>0.001</td>
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<td>0.120</td>
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<tr>
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<td>0.310</td>
<td>0.014</td>
<td>0.264</td>
<td>0.022</td>
<td>0.011</td>
<td>0.499</td>
<td>0.324</td>
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<td>0.000</td>
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<td>0.001</td>
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<td>0.094</td>
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<tr>
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<td>0.054</td>
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<td>0.047</td>
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<td>0.192</td>
<td>0.022</td>
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<tr>
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<td>0.204</td>
<td>0.374</td>
<td>0.011</td>
<td>0.299</td>
<td>0.476</td>
<td>0.009</td>
<td>0.000</td>
<td>0.456</td>
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</tr>
<tr>
<td>REX1</td>
<td>0.271</td>
<td>0.109</td>
<td>0.104</td>
<td>0.499</td>
<td>0.097</td>
<td>0.272</td>
<td>0.279</td>
<td>0.477</td>
<td>0.456</td>
<td>0.193</td>
<td></td>
</tr>
<tr>
<td>SEEN1</td>
<td>0.245</td>
<td>0.466</td>
<td>0.120</td>
<td>0.324</td>
<td>0.238</td>
<td>0.346</td>
<td>0.047</td>
<td>0.061</td>
<td>0.257</td>
<td>0.193</td>
<td></td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (1-tailed).**

*Correlation is significant at the 0.05 level (1-tailed).
also positively correlated with the capital-labor ratio. This may be due to the fact that capital-intensive operations lead to higher output and less wastage therefore increasing the growth levels. The credit amount is found to have a positive correlation with the growth of the firm. This can be explained by the fact that as a firm acquires more credit it becomes highly capitalized and therefore is capable of expanding and engaging more labour. The correlation matrix can be used to check for the existence of multicollinearity in a model. Multicollinearity exists when there is high correlation between the explanatory variables though this cannot be inferred to be the case where the variables move as explained by theory.

**Model Summary**

The model in this study is estimated using 10 explanatory variables. To capture the effects of qualitative variables in the model, we estimated the model by dropping one dummy variable from each category of dummy variables by using interaction terms and including a common intercept to avoid the problem of linear dependency.

From the estimation, we find $R^2$ to be 0.314 and the standard error of the estimation as 0.191. Since the study is cross-sectional in nature, the value of $R^2$ does not need much interpretation as a measure of the extent to which the dependent variable is explained by the explanatory variables. The value of the adjusted $R^2$ is found to be 0.214.

<table>
<thead>
<tr>
<th>R</th>
<th>R Square</th>
<th>Adj. R Square</th>
<th>S.E of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.56019</td>
<td>0.313809</td>
<td>0.214361</td>
<td>0.1938902</td>
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</tbody>
</table>

**TABLE 12: ANOVA TABLE**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Degrees of freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.186262</td>
<td>10</td>
<td>0.118626</td>
<td>3.155505</td>
<td>0.0022308</td>
</tr>
<tr>
<td>Residual</td>
<td>2.593946</td>
<td>69</td>
<td>0.037593</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3.780208</td>
<td>79</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a) **Dependent Variable**: change in employment
b) **Independent Variables**: (Constant), male, natural log of current employment, capital-labor ratio, experience, has education, credit amount, service industry, manufacturing industry, concurrent business, age of the firm

From the ANOVA table we get the estimated sum of squares to be 1.186262 and the residual sum of squares to be 2.593946 with degrees' of freedom 10 and 69 respectively. The ANOVA table allowed us to test the hypothesis that all slope parameters were equal to zero. From the table, F-calculated is 3.156 and it's significant at this level.

**Table 13: COEFFICIENTS**

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t-values</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.16243</td>
<td>0.10113</td>
<td>1.606155</td>
<td>0.112807</td>
</tr>
<tr>
<td>a</td>
<td>-0.00272</td>
<td>0.00708</td>
<td>-0.063034</td>
<td>-0.38376</td>
</tr>
<tr>
<td>CLARA</td>
<td>-1E-05</td>
<td>1.9E-05</td>
<td>-0.062297</td>
<td>-0.56114</td>
</tr>
<tr>
<td>CREMO</td>
<td>-5.2E-07</td>
<td>1.9E-07</td>
<td>-0.401501</td>
<td>-2.75703</td>
</tr>
<tr>
<td>COBE1</td>
<td>-0.22902</td>
<td>0.07612</td>
<td>-0.388675</td>
<td>-3.00857</td>
</tr>
<tr>
<td>ED1</td>
<td>0.166958</td>
<td>0.07627</td>
<td>0.242691</td>
<td>2.189146</td>
</tr>
<tr>
<td>ENTER2</td>
<td>-0.02533</td>
<td>0.05425</td>
<td>-0.056423</td>
<td>-0.46698</td>
</tr>
<tr>
<td>ENTER3</td>
<td>0.059202</td>
<td>0.06181</td>
<td>0.115898</td>
<td>0.957816</td>
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<tr>
<td>In lc</td>
<td>0.117224</td>
<td>0.05262</td>
<td>0.31249</td>
<td>2.22772</td>
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<td>REX1</td>
<td>-0.0192</td>
<td>0.04587</td>
<td>-0.044039</td>
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<td>SEEN1</td>
<td>-0.05419</td>
<td>0.04632</td>
<td>-0.124596</td>
<td>-1.16988</td>
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</tbody>
</table>

From the estimation result we get the variables for the credit amount (CREMO), concurrent business ownership (COBE1), Education (ED1), current employment (ln-lc) to be significant at the 5% level.

CREMO is significant at 5% level implying that credit determines the growth of the firm. Most coefficients do not show or depict the expected signs. Credit amount shows a negative sign. This may be due to the fact that, at high credit levels, firms are indebted and therefore use most of their earnings to settle the loans. Also with poor economic conditions coupled with demolitions of illegal market structures where most MSEs operate, it was difficult for the MSEs to realize substantial growth. ED1 has a positive sign as expected. This implies that enterprises run by educated entrepreneurs grow faster. CLARA has a negative sign. This implies High Capital – Labor ratios are not beneficial to MSE growth since most of the MSE’s are not capital intensive.
The types of enterprise operated are not significant at either 5% or 10% level though manufacturing enterprises (ENTRE 3) grow faster than trade enterprises (ENTER 1), while the service enterprises grow slowly than trade enterprises. Most of the MSEs studied show a positive growth rate. This is seen in the positive increase in the number of workers or the capital labor ratio. At the very initial stage, practically all the firms start with very few workers with the intention of increasing the number soon after. Except for a few most of the firms had a positive growth.

Financial liberalization and the existence of an SME Credit have constraints on lending to SMEs. Monetary policies on lending to SMEs lending. In order to accelerate this process, institutional development among banks and non-bank intermediaries should be aimed at building their capacity to reach and assess liable SMEs. Better integration between formal and informal segments of the financial system is needed to expand the flow of credit to SMEs through those financial agents with the best information on their operations.

Substantial training efforts will also be needed in the coming years before banks develop SME Units as specialized profit centers.

Lenders have placed increasing emphasis on better project appraisal to reduce the risk of unreliable projects. This needs to be matched by improved capability of SME applicants to provide information and documentation required. Institution building efforts are also needed to improve the flow information between financial institutions.
CHAPTER V

PROBLEMS, CONSTRAINTS AND CONCLUSIONS

Most of the entrepreneurs cited the problems of competition, lack of market, lack of product publicity and knowledge about what customers want. Accessibility to credit and collateral was also reported by the entrepreneurs. Lack of transport costs and poor road conditions was reported. Some entrepreneurs indicated harassment problems in obtaining business license.

As outlined in National MSE Baseline Survey, 1999 (pg70), access to markets for MSE products as well as access to finance constituted the most dominant and severe problem facing MSEs in Nairobi. More than one-third of the sampled population cited difficulties arising from market saturation or low demand for products.

The second most severe constraint related to difficulties in accessing credit due to collateral.

Most MSEs operate closely with households; thus, any crisis in the households becomes a challenge to their survival. MSEs operated by women were severely affected as business operation relied on stability of their families. Since women constituted many of the SMEs most of the credit was not wholly utilized for the intended business purpose. This contributed to the negative impact of credit on growth.

About two-thirds of the total number of MSEs are in the trade group (wholesale and retail). About 72% of them are one-person enterprise unit’s i.e. there is only one person working in the enterprise. Hence, about 72% of the total employment in MSEs are accounted for by owners working in the enterprises.

In conclusion and from facts extracted from the study, it should be noted that special consideration is needed regarding the following issues:
Expansion of credit of MSEs: Loans have led to improvement of the living standards of the beneficiaries especially women who are the majority. They are able to pay school fees for children and from the profit they get they feed their families, afford proper living houses and better health care.

The MSEs studied show a positive growth rate: This is seen in the positive increase in the number of workers or the capital labour ratio. At the very initial stage, practically all the firms start with very few workers with the intention of increasing the number soon after. Except for the one-man owner business most of the firms had Financial liberalization and the existence of an SME credit: This positive growth has not been sufficient to overcome constraints on lending to MSEs in Nairobi. There has been lack of formal monetary policies on lending. In order to accelerate this process, institutional development among banks and non-bank intermediaries should be aimed at building their capacity to reach and assess reliable MSEs. Better integration between formal and informal segments of the financial system is needed to expand the flow of credit to MSEs through those financial agents with the best information on their operations.

Substantial training efforts will also be needed in the coming years before banks develop MSEs as specialized profit centers.

Lenders have placed increasing emphasis on better project appraisal to reduce the risk of unreliable projects. This needs to be matched by improved capability of MSE applicants to provide information and documentation required. Institution building efforts are also needed to improve the flow of information between financial institution

Raw materials: Raw materials are specific to the activity being undertaken. Availability of raw materials at affordable prices was another constraint to MSE growth. Some raw materials are seasonally produced or got from far locations. This reduces the profitability of the firms as they have to raise prices, which repulse customer
REFERENCES


Cuevas, C.E and Bennett L., (1996) “Sustainable Banking with the poor”, Journal of International Development. 8(2)


33


ICEG, Policy Briefs. Various issues.


Greetings

I am a post graduate student at the University of Nairobi. I am conducting a study on the impact of credit on small enterprise growth in Nairobi. I would like to see the owner of the business. I would also like to assure you that any information you give is merely for academic purposes and will be treated confidentially.

CASE NUMBER..........................

1.0 PERSONAL DATA.

1.1 Name of the respondent..............................

1.2 Position in the business..............................

1.21 Business Owner...................................

1.22 Business Operator................................

1.23 Others............................................

1.3 Sex

1.31 Female........1.32 Male

1.4 Age......................... years

1.5 Marital Status.

1.51 Married .........................
1.52 Single .........................

1.6 Can you read and write? Yes...... No....

1.7 How much formal Education do you have?
   1.71 None.........
   1.72 Some primary Education............
   1.73 Completed Primary School.......... 
   1.74 Some Secondary School..............
   1.75 Completed form Four............... 
   1.76 Completed form Six.................. 
   1.77 Completed University............... 

1.8 Location of business (by observation)
   1.81 Inside the C.B.D(Central Business District) 

   1.82 Within a market Area................
   1.83 Within the Estate...................
   1.84 Next to Industrial set up.............
   1.85 On the roadside....................
   1.86 Other...................................

1.9 Do you have
   1.91 Postal address? Yes.......No.....
   1.92 Telephone? Yes....... No.....

1.10 Type of activities
   1.101 Woodwork.......................
1.102 Metal work
1.103 Leather work
1.104 Posho milling
1.105 Tailoring
1.106 Retailing
1.107 Wholesaling
1.108 Distribution
1.109 Hotel
1.100 Other

2.0 EXPERIENCE
2.1 How old is your business?.........years
2.2 Did you start the business? Yes ....No.....
2.3 If yes, When...........year.
2.4 If no, Who started it?........
   2.4.1 Father........
   2.4.2 Mother........
   2.4.3 Grand parents........
   2.4.4 Others...........
2.5 For how long have you done this kind of work even outside this business?..........years.

3.0 SAVINGS AND CREDIT ASSOCIATIONS (SCAS)
   (BORROWING FUNDS)
3.1 Do you take part in SCA?
   3.11 Yes ....... 3.12 No....... 
3.2 How many are you?............
3.3 When was your SCA formed?............
3.4 Why did you form the SCA?
3.41 To save
3.42 To get source of loans
3.43 To get capital for establishing business
3.44 To make money for various purposes
3.45 Others(specify)

3.5 How much did you contribute per head............................
3.51 If you contribute per month how much is it per head.....
3.52 If you contribute per year, how much is it per head........

3.6 How much did you get back (deposit plus interest)? At the end of: 2000 and 2001 Ksh................./Kshs.................

3.7 Did you borrow from the fund?
3.71 Yes............3.72 No.............

3.8 How much did you borrow during the year?
3.81 1999/2000 Ksh.................
3.82 2000/2001 ksh.................
3.83 2001/2002 Ksh.................

3.9 In the act of last borrowing 2001/2002 how much did you spend on transport? Ksh.................

3.10 In the act of last borrowing 2001/2002 how much did you spend on rest house/hotel? Ksh........

3.11 In the act of last borrowing 2001/2002 how much did you spend on application fees, other fees etc Ksh.................

3.12 How much did you payback (principal plus interest) during the year?
3.121: 1999 Ksh....................................
3.122: 2000 Ksh....................................
3.123: 2001 Ksh.......................................
3.124: 2002 Ksh........................................

3.13 If you did not pay back on time how many months did it take you to pay?..............................................

3.141 Food
3.142 Other non durable consumables
3.143 For Hire of more labour/employees.
3.144 Business capital
3.145 Loan repayment
3.146 School fees/uniform
3.147 Lending
3.148 General support of relatives at home
3.149 Others

3.15 Was it enough?
3.151: Yes........3.152 : No...........

3.16 If not did you get money from other sources?
3.161: Yes........3.162: No...........

3.17 What sources were they?
3.171 Salary
3.172 Business
3.173 Farming
3.174 Roscas
3.175 Traders
3.176 Friends
3.177 Relatives
3.178 Neighbours
3.179 Other(specify)

3.18 How much did you get from them? Ksh..............................

3.19 Where did the money you contributed to the SCA in 2001/2002 come from?
3.191 Salary
3.192 Business
3.193 Farming
3.194 Other(specify)

3.20 Is there any security you give in order to get loans?
3.21: Yes.......... 3.22 No........

3.21 If yes specify.................................

3.22 How many months did it take you to repay the loan?
............................................months.

3.23 What was the time period of the loan?
3.231 1 year
3.232 6 months
3.233 Indefinite
3.234 Others(specify)

3.24 How many times have you secured loans since the start of your business.
  3.241 Once
  3.242 Twice
  3.243 Thrice
  3.244 Four times
  3.245 Five times
  3.246 More than five times.

**EMPLOYMENT**

4 Other than yourself how many other employees do you have in your business?

................................................

4.1 How many are male?..........................

4.2 How many are female?.....................

4.3 What is the mode of their remunerations?
  4.31 Monthly salaries
  4.32 Weekly wages
  4.33 Daily wages
  4.34 In kind
  4.35 Others (specify)

4.4 How many days do they work in a week?

4.5 How may hours do they work in a day?.................................
4.6 Other than the salaries do you have other benefits for the employees?
    4.61 Yes ........... 4.62 No ...........

4.7 If yes, specify ...........................................

4.8 Did your employees attain some skills in their areas of specialization?
    4.81 Yes ........... 4.82 No ...........

4.9 If yes specify ...........................................

4.10 For how long have you worked with the same workers before they left for other jobs? ...........................................

4.11 Do you intend to engage more workers in the next one year?
    4.111 Yes ........... 4.112 No ...........

4.12 What percentage of your business profits do you use in paying salaries to your employees? ...........................................

4.13 Out of the workers you have how many are
    4.131 Paid workers ...........................................
    4.132 Family workers ...........................................
    4.133 Apprentices ...........................................

4.14 Are there any problems you encounter in getting labourers?
    4.141 Yes ........... 4.142 No ...........

4.15 If yes which problems?
    4.151 Lack of labourers ...........................................
    4.152 Lack of money to pay wages ...........................................
    4.153 Others ............................................
5.0 CAPITAL

5.1 What was the initial level of capital you started the business with?
Ksh..............................

5.2 Approximately how much capital do you have at present?............... 

5.3 How much do you incur in servicing the capital every month?
Ksh..............................

5.4 How much do you incur in repair and maintenance of equipment every month?..............................

6.0 GENERAL

6.1 By looking at your business can you say if it is successful or not?........................................................................................................

6.2 Reasons for answers in
6.1............................................................................................................
............................................................................................................
............................................................................................................

6.3 List three problems which you think hinder you from expanding your business........................................................................................................
6.31............................................................................................................
6.32............................................................................................................
6.33............................................................................................................

6.4 State four measures that the government should put to improve your business.
THANK YOU VERY MUCH FOR TAKING YOUR TIME TO ASSIST ME