



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
Volume 11 Issue 11 Version 1.0 November 2011
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Microfinance And Micro & Small Enterprises (Mses) Survival In Nigeria – A Survival Analysis Approach

By Abiola Babajide
Covenant University, Nigeria.

Abstract - The main objective of this study is to examine the impact of microfinance on micro and small business survival in Nigeria. Data for the study are derived from both primary and secondary sources. First, a survey of MFB entrepreneur – clients was undertaken using simple random sampling technique to select our respondents; then, some data were extracted from the client's record with the Microfinance Banks (MFBs) on profit and sales. The data obtained were analysed using Kaplan Meier and Cox regression analysis. The findings revealed that micro financing enhance survival of Micro and Small Enterprises (MSEs) but most of the enterprises remain at the survival level of the business life cycle. We recommend that enterprise finance by MFBs should be linked up with larger financing window like the Small and Medium Enterprise Equity Investment Scheme (SMIEIS) fund or Strategic Partners like the commercial banks for expansion and growth funding after survival. We also recommend immediate recapitalization of the MFBs to enable them support MSEs adequately.

Cox-Regression, Kaplan-Meier, Micro & Small Enterprise (MSEs), Microfinance Banks (MFBs), Nigeria, Survival Analysis,

GJMBR-A Classification : FOR Code: 150203, 150205 JEL Code: G21, E17, G32



Strictly as per the compliance and regulations of:



© 2011 . Abiola Babajide. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License <http://creativecommons.org/licenses/by-nc/3.0/>, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Microfinance And Micro & Small Enterprises (Mses) Survival In Nigeria – A Survival Analysis Approach

Abiola Babajide

November 2011

79

Version 1

Issue XI

Volume XI

Research

Management and Business

Journal of

Global

Journals

inc.

USA

Abstract - The main objective of this study is to examine the impact of microfinance on micro and small business survival in Nigeria. Data for the study are derived from both primary and secondary sources. First, a survey of MFB entrepreneur – clients was undertaken using simple random sampling technique to select our respondents; then, some data were extracted from the client's record with the Microfinance Banks (MFBs) on profit and sales. The data obtained were analysed using Kaplan Meier and Cox regression analysis. The findings revealed that micro financing enhance survival of Micro and Small Enterprises (MSEs) but most of the enterprises remain at the survival level of the business life cycle. We recommend that enterprise finance by MFBs should be linked up with larger financing window like the Small and Medium Enterprise Equity Investment Scheme (SMIEIS) fund or Strategic Partners like the commercial banks for expansion and growth funding after survival. We also recommend immediate recapitalization of the MFBs to enable them support MSEs adequately.

Cox-Regression, Kaplan-Meier, Micro & Small Enterprise (MSEs), Microfinance Banks (MFBs), Nigeria, Survival Analysis,

I. INTRODUCTION

Over the past three decades, particularly since its inception in Bangladesh thirty years ago, microfinance has been widely recognized as a powerful tool for alleviating poverty and enhancing entrepreneurial activities among the world's poorest communities, particularly women (Buttenheim, 2005). Models for microfinance provision have proliferated around the world; many are women-focused and use group-lending techniques to minimize risk and to develop and leverage social capital among borrowers. Various development approaches have been devised by policymakers, international development agencies, nongovernmental organizations, and others aimed at poverty reduction in developing countries. One of these strategies, which has become increasingly popular since the early 1990s, is the microfinance schemes, which provided financial services in the form of savings and credit opportunities to the working poor (Johnson & Rogaly, 1997).

Micro and small enterprises (MSEs) are the backbone of many economies in Sub-Saharan Africa (SSA) and hold the key to possible revival of economic growth and the elimination of poverty on a sustainable basis. Despite the substantial role of the MSEs in SSA's economies, they are denied official support, particularly credit, from institutionalized financial service organizations that provide funds to businesses (Afrane, 2002). In many countries, people have relied on the mutually supportive and benefit-sharing nature of the social networking of the informal sector for the fulfilment of economic, social and cultural needs and the improvement of quality of life (Portes, 1998). Networks based on social capital exist in developed as well as developing countries including Nigeria. The inability of the SMEs to meet the standard set by the formal financial institutions for loan consideration provided a platform for informal institutions to attempt to fill the gap usually based on informal social networks; this is what gave birth to micro-financing.

A number of studies have been carried out on the impact of microfinance on entrepreneurial development. Some scholars focused on the mechanism by which poverty is reduced. Amin, Rai and Topa (2003) focus their article on the ability of microfinance to reach the poor and the vulnerable. They are of concern that microfinance is only serving people slightly below or above the poverty line, and that the really poor and destitute are being systematically excluded. Copestake, Bhalotra and Johnson (2001) analysed the impact of microfinance on firms and individual wellbeing. Copestake et al. (2001) focused on business performance and household income to establish a link between availability of microfinance and overall wellbeing of the poor. Similarly, Afraine (2002) reviewed impact of microfinance intervention programmes in two African Countries (Ghana & South Africa) testing the impact of microfinance on business incomes, access to life-enhancing facilities, and empowerment of the people, particularly women. Evans and Adams (1999) approach the microfinance from a different perspective; they seek to explain non participation in the microfinance evolution, stating that while microfinance is used as a viable tool to fight poverty, more than 75% of the poor individuals choose *not to participate for various reasons. Bekele and Zeleke*

*Author: (Ph.D), Department Of Banking and Finance, Covenant University, Ota P.M.B 1023, Ota, Ogun State, Nigeria.
Tel : 2348033249533, Email : abiolababajide@gmail.com,
abiola.babajide@covenantuniversity.edu.ng*

(2008) examined the impact of iqub scheme (a type of microfinance programme in Ethiopia) on long term survival of micro, small and medium enterprises (MSMEs) in Ethiopia. Ryne and Holt (1994) provide a meta-analysis of microfinance and focuses on women empowerment, intending to show why various studies conflict in their conclusions as to the impact of microfinance on women empowerment. Park (2001) evaluates microfinance programmes in China using 3 key measurement variables (target, sustainability and overall impact). The above analysis shows increase participation both in research and practice of microfinance particularly the impact assessment. Despite increase activities in the sector, trend in research did not provide sufficient justification for the link between microfinance and entrepreneurial development in developing countries. Besides, empirical evidence emerging from various studies about the effect of microfinance on entrepreneurial development as a whole has so far yielded mixed results that are inconclusive and contradictory. Also, none trace the impact of microfinance on small business survival, except Bekele and Zeleke (2008), which was carried out in Ethiopia. Moreover, the impact of microfinance on enterprise development has not received adequate research attention in Nigeria. Research also shows that most of the studies on impact of microfinance on enterprise development that have been reported were carried out in industrialized countries except some few cases in some African countries but none in Nigeria. This mean that there is a major gap in the relevant literature on developing countries particularly Nigeria which happen to be the most populated country in Sub-Saharan Africa (SSA).

This research attempts to fill this gap by examining the situation in Nigeria and providing empirical evidence on the effects of microfinance on enterprise survival in Nigeria. The importance of microfinance to entrepreneurial development made the Central Bank of Nigeria (CBN) to adopt microfinance as the main source of financing entrepreneurship in Nigeria. Despite this, access to finance is still considered as one of the major hindrances to entrepreneurial development in Nigeria (Ubom, 2003). Despite increasing number of government programmes and policies to encourage entrepreneurship in the country, Nigeria still rank as one of the poorest countries in the world with unemployment level rising everyday despite proliferation of small businesses as evidence in the annual report of the Corporate Affairs Commission (CAC). It becomes therefore necessary to undertake an assessment of the extent to which microfinance is impacting on enterprise survival in Nigeria. This is the overall objective of this paper. The specific objectives are to: (i) ascertain the survival time of micro and small business in Nigeria; (ii) ascertain if the survival time differs by sector (iii) examine the effects of micro-

financing on micro and small business survival in Nigeria (iv) create the awareness that entrepreneurial activities require different method of financing at different stage of business development. In other to achieve the above stated objectives, the following research questions are advanced: (i) what is the survival time of micro and small enterprises in Nigeria? (ii) does the survival time differ by sector? (iii) to what extent can microfinance enhance the survival of micro and small enterprises in Nigeria? (iv) what are the microfinance factors that contributes to small business survival in Nigeria? The following null hypotheses are proposed and tested in the course of this study. (i) There is no significant different between survival time of micro and small enterprises in Nigeria. (ii). There is no significant difference between survival time of different sector of the Nigerian economy. (iii). Microfinance makes no significant contribution to the survival of micro and small enterprise in Nigeria. The rest of the paper is divided into four sections. In section II, relevant theoretical and Nigeria business environment are reviewed while the methodology of the study is explained in section III. The findings of this study are presented in section IV while section V contains the concluding remarks.

II. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Churchill and Lewis (1983) see growth as part of the natural evolution of a firm. They identified five stages of small business development as: existence, survival, success, take-off and resource maturity. Each stage is characterised by size, diversity, complexity, and the following management factors: managerial style, organizational structure extent of formal system, major strategic goal, and owner involvement. At the existence stage, the main problems are obtaining customers and delivering the product contracted for by them. At the survival stage, the firm has enough customers and is able to satisfy them. The main problem at this stage is managing the revenue and expenses of the organization to achieve a breakeven point. The organization is still simple at this stage; most of the supervision is carried out by the salesman or the foreman and not the entrepreneur any more. They described the success stage as a stage characterized by two possibilities, disengagement or growth. At the disengagement stage, the company is healthy but ceases to grow. The professional staffs come on board. This can be the last development stage and on for a long time. The other possibility at success stage is to strive towards growth - the entrepreneur marshals resources for growth. It becomes important to train managers to meet the need of the growing business. Once it has successfully passed through this stage, the company proceeds to the take-off stage, and the main focus here is on how to grow rapidly and how to finance that growth. The main

concern at this stage bothers on delegation, transferring responsibility and controls from the entrepreneur to others in order to improve managerial effectiveness. At the resource maturity stage, the management is decentralized and the organization is adequately staffed. Systems are extensive and well developed. After this stage, two clear possibilities emerge: continued performance or suffocation.

The main focus of the work of Churchill and Lewis (1983) is in explaining further the success stage. At the success stage one of two things can happen; the owner/manager may maintain the present profit status quo by relying on internally generated fund for investment and essentially, maintain the status quo, or the owner manager may decide to grow the business; the owner consolidates the company and marshals resources for growth through the borrowing power of the company. In order words, he seeks for external loan in order to grow the company.

III. THE NIGERIAN BUSINESS ENVIRONMENT

The Nigerian business environment offers many entrepreneurial opportunities. For this reason, several programmes and policies were put in place by both the Federal and State government to encourage entrepreneurial activities in the country. Notable among such programmes were the establishment of Industrial Development Centres across the country (1960-70), the Small Scale Industries Credit Guarantee Scheme (SSICS) 1971, specialized financial schemes through development financial institutions such as the Nigerian Industrial Development Bank (NIDB) 1964, Nigerian Bank for Commerce and Industry (NBCI) 1973, and the National Economic Recovery Fund (NERFUND) 1989. All of these institutions merged to form the Bank of Industry (BOI) in 2000. Also in 2000, Government also merged the Nigeria Agricultural Cooperative Bank (NACB), the People's Bank of Nigeria (PBN) and Family Economic Advancement Programme (FEAP) to form the Nigerian Agricultural Cooperative and Rural Development Bank Limited (NACRDB). The Bank was set up to enhance the provision of finance to the agricultural and rural sector. Government also facilitated and guaranteed external finance by the World Bank (including the SME I and SME II loan scheme) in 1989, and established the National Directorate of Employment (NDE) in 1986.

In 2003, the Small and Medium Enterprise Development Agency of Nigeria (SMEDAN), an umbrella agency to coordinate the development of the SME sector was established. In the same year, the National Credit Guarantee Scheme for SMEs to facilitate its access to credit without stringent collateral requirements was reorganised and the Entrepreneurship Development Programme was revived. Just like other government

initiative programme in the country, all the programmes failed to achieve expected result in the SME sector. In 1999, the banks through its representatives 'the Banker's Committee' at its 246th annual general meeting held on December 21, 1999. The banks agreed to set aside 10% of their profit before tax (PBT) annually for equity investment in small and medium scale industries. The scheme aimed, among other things, to assist the establishment of new, viable SMI projects; thereby stimulating economic growth, and development of local technology, promoting indigenous entrepreneurship and generating employment. Timing of investment exit was fixed at minimum of 3 years. The fund was called Small and Medium Industries Equity Investment Scheme (SMIEIS) fund. The fund also failed due to slow utilization of the available fund. The thrust of controversy is in the desire of the Banks to acquire controlling shares in the funded enterprises and the entrepreneurs' resistance to submit control; also inability of the banks to adapt equity investment which is quite different from what the banks are familiar with in credit appraisal and management and lack of proper structure for effective administration of the scheme when it took off among other factors. The failure of all of these programmes put together necessitates the need for alternative financing window for SMEs in Nigeria. The Microfinance Policy Regulatory and Supervisory Framework (MPRSF) was launched in 2005. The policy among other things, addresses the problem of lack of access to credit by small business operators who do not have access to regular bank credits. It is also meant to strengthen the weak capacity of such entrepreneurs, and raise the capital base of microfinance institutions. The objective of the microfinance policy is to make financial services accessible to a large segment of the potentially productive Nigerian population, which have had little or no access to financial services and empower them to contribute to rural transformation.

IV. CONCEPTUAL ISSUES IN MICROFINANCE

Microfinance evolved as an economic development approach intended to benefit low income men and women. The term refers to the provision of financial services to low income clients, including the self employed. Financial services generally include savings and credit; however, some microfinance institutions provide insurance and payment services. In addition to financial intermediation, many microfinance institutions provide other non financial services such as advisory services, health talk, pre-loan training, financial management training and provides platform social network. Microfinance clients are typically self – employed, low income entrepreneurs in both urban and rural areas. Clients are often traders, street vendors, small farmers, artisans and small scale producers such

as black smiths, seamstresses, brick makers and furniture makers (Ojo, 2003). Ehigiamusoe (2005), describe microfinance as “flexible processes and structures by which financial services are delivered to owners of microfinance enterprise on a sustainable basis”. Microfinance recognizes the peculiar challenges of micro enterprises and of their owners. It recognizes the inability of the poor to provide tangible collateral and therefore promotes social capital as collateral substitution.

Disbursement and repayment are structured to suit credit need and cash flow pattern of small businesses (Aderibigbe, 2001). Kimotho (2005) defined microfinance simply as the provision of very small loans (micro – credit) to the poor, to help them engage in new productive business activities and/or to grow/expand existing ones. However, overtime, microfinance has come to include a broader range of services. These include mainly credit, savings opportunities, insurance and money transfer, as practitioners came to realize that the poor, who lacked access to traditional formal financial institution, needed and required a variety of financial products to achieve meaningful improvement in their business activities. USAID (2005) explained that microcredit is commonly defined in terms of loan amount as a percentage of average per capita income. In the context of Nigeria, with a per capita GDP of N42,000 (about \$300) in 2003, loans up to N50,000 (around \$350) will be regarded as micro loans, while Micro savings are defined as savings accounts with a balance of less than N8,400 (about \$50), that is less than 20% of the average annual income per capita. While microfinance refers to loans, savings opportunities, insurance, money transfers and other financial products targeted at the poor, micro-credit refers specially to small loans. The average loan size varies from country to country, but in most cases, the average loan is equivalent to \$120.0 – 150.0 in the respective currency. For example, in Philippines, the average loan size is \$124.0. (Iganiga, 2008).

V. RESEARCH METHODOLOGY

The multiple-method strategy was adopted for this study. The study was designed to combine primary survey based data with secondary information extracted from the customers' record with the bank over five year period. At every point a customer gets a new loan, record of the customers' changes in sales, profit and asset are kept by the banks to monitor the customer progress. The purpose of extracting such data is to obtain cross-referencing data and some independent confirmation of data, as well as a range of opinions. The panel data, that is the combination of primary and secondary longitudinal data already taken by the banks give a better perspective on the client/customers profile over a period of time and make better judgment

possible. The theoretical population of the study consists of the entire MSEs in the country. However, the study was restricted to South-West geopolitical zone comprising of six states, the states are Lagos, Ogun, Osun, Oyo, Ondo and Ekiti states. The choice of South-west stems from the fact that the concentration and the predominance of MSEs in this zone are easily identifiable particularly with the inclusion of Lagos state which is the commercial centre of the nation. For effective coverage and lower cost, judgemental sampling technique was used to select the participating MSEs, this is because certain criteria were set and that is, continuous participation in microfinance programme for a period of five years. Only MSEs who are able to meet this criteria form our sample frame. A simple random sampling technique was used to select a total of 623 entrepreneurs that constituted our sample size. The sample size was determined using Bartlett, Kotrlik and Haggins (2001) model for determining the minimum returned sample size for any given population. The primary data consists of a number of items in well structured questionnaire that was administered to and completed by the respondents. The decision to structure the questionnaire is predicated on the need to reduce variability in the meaning possessed by the questions as a way of ensuring comparability of responses. To ensure the validity and reliability of the questionnaire used for the study, experts in the field of microfinance were consulted to look at the questionnaire items in relation to its ability to achieve the stated objectives of the research, level of coverage, comprehensibility, logicity and suitability for prospective respondents. A pilot test which took the form of test –retest method was conducted prior to the actual study. Data collected from the questionnaire were analysed using Kaplan Meier and Cos regression analysis.

A total of 274 copies of the questionnaire, representing 44% of the total sample size were administered in Lagos State. In Ogun State, a total of 106 copies of the questionnaire were distributed, representing 17% of the sample size. In Oyo 96 (representing 15%) were distributed, in Osun State, 88 copies of the questionnaire were distributed representing 14% of the total sample. In Ekiti and Ondo States 26 and 33 copies of questionnaire were distributed respectively, representing 4% and 5% respectively of the total sample size. The questionnaires were distributed using the geographical spread of microfinance bank in South-west geopolitical zone. In all, a total of 502 copies of the questionnaire were returned from the six States out of 623 copies administered. This represents a total response rate of 80.5%. The high return rate achieved from the field survey can be attributed to the support received from the loan/field officers in the banks visited. A total of 106 Microfinance Banks were used for the study and the

copies of questionnaire were distributed at an average of six (6) copies of questionnaire per Bank.

The duration of survival of businesses was measured for each of the 502 enterprises in the study using five year business summary linked with survey data, starting from January 2004 and terminating at December 2008. Firms that were still operational and active at the end of the period December 2008 were considered censored. Censoring implies that the time to the event (in this case death) has not occurred. That is they are still active businesses at the end of the study period. The total censored businesses were 457 while 45 were not censored. The businesses not censored are businesses researcher could not obtain data from bank record, particularly towards the end of the study period on micro credit and micro-savings in 2007 and 2008. Survival time is defined as the number of years of operation between 01 January 2004 and the date of last data obtained, December 2008.

a) Model Specification

The model specification used in this study was based on hypothesis of the study. This statistical model is presented below to examine the extent to which micro finance facilities have enhanced the survival of micro and small enterprise (SMEs) in Nigeria. The model adopted for this study was developed from the work of Bekele and Zeleke (2008) they identified six key predictors of small business survival for microfinance bank users as; ability to convert profit to investment, past bankruptcy, entrepreneur level of education, participation in microfinance, ability to make profit and managerial ability. Consequently, five of the variables were adopted as ultimate predictors of small business survival, together with easy access to microcredit, contact with lender/ loan officers, and mandatory savings, while we remove past bankruptcy. The survival analysis examines the relationship of the survival distribution to covariates. It entails the specification of a linear-like model for the log hazard. Kauffman and Wang (2001, 2003) specified Cox survival model using industry specific characteristics, firm specific characteristics and e-commerce specific characteristics as the covariates in a model specified as follows;

$$\text{Logh}_0(t) = \alpha + \beta_1 x_{i1}(t) + \beta_2 x_{i2}(t) + \dots + \beta_k x_{ik} \dots \dots \dots (1)$$

Where;

X takes the form of X1....X12. The same model was adopted in this study with a little modification to include financing method as part of the covariate removing e-commerce variable. Hence it was specified as follows;

$$\text{Logh}_0(t) = \alpha(t) + \beta_1 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3} + \beta_4 X_{i4} + \beta_5 X_{i5} + \beta_6 X_{i6} + \beta_7 X_{i7} + \beta_8 X_{i8} + u_1 \dots \dots \dots (2)$$

Where;

i is a subscript for observation

Xs' are the covariates

α is a constant that represents the log baseline and

Log h₀(t) takes a binary form, 1 if the event occurs and 0 if the event does not occur

β = is the vector of parameters to be estimated.

The predictor variables are given as X1, X2, X3, X4, X5, X6, X7, and X8;

Where X1, = Regular participation in Microfinance, X2, = Ability to convert profits into investment, X3, = Ability to make profit, X4, = Entrepreneur level of education, X5 = Technical capacity, X6 = Contact with loan officer, X7 = Access to microcredit, X8 = Mandatory micro savings

VI. RESULT AND DISCUSSION

a) Result Analysis

i. Kaplan –Meier Survival Analysis Estimate

Kaplan-Meier survival probability estimates and plots were used to compare the survival time of businesses with regard to participation in microfinance programmes. Tables 1 (see appendix) shows that small scale enterprises have higher survival time of 4.82 years while micro enterprises have survival time of 4.42 years. Survival time for the total sample is 4.53 years with strong association with participation in microfinance programme. The significance of the estimate was tested using three diagnostic tests. Table 2 (See appendix) shows that the result of the three tests, Log rank, Breslow (generalized wilcoxon) and Terone Ware are all significant at 1%. The result implies that there is strong evidence to show that there is statistical difference between the survival time for micro and small enterprises in Nigeria.

ii. Kaplan Meier Survival Estimate by Kind of Business

Table 3 (see appendix) shows Kaplan-Meier survival probability estimate by sector. The table shows that service sector has the highest time of survival of 4.67 years. The second highest survival time is agriculture sector with 4.64 years. The third highest survival probability is the trading sector with survival probability of 4.59 years, followed by the artisans with survival probability of 4.36 years. And lastly, the manufacturing sector has the least survival probability of 4.18 years. The result obtained is expected. It simply implies that microfinance is not the most appropriate method of financing manufacturing business in Nigeria. Firm level analysis has shown that micro financing mostly suit service and retail businesses because they require relatively less capital and constitutes the majority of new firms, they thrive in rather risky conditions, and their survival is based on their ability to generate enough profit. Agricultural businesses have shown a relatively better survival rates than trading and artisans, this is

probably because most of the agricultural businesses are based on group lending. Overall survival probability for enterprise finance by Microfinance Bank is 4.53 years. Tables 4 (see appendix) shows the result of the three overall diagnostic test of Log rank, Breslow (generalized wilcoxon) and Terone Ware. They are all significant at 1%. This implies that there is strong evidence to show that survival time among the five sectors (that is trading, manufacturing, artisans, agriculture and service) is statistically different.

iii. *Adjusted Hazard Ratio from Cox Proportional Hazard Model Variables in the Equation*

Table 5 (see appendix) shows hazard ratios estimated from Cox regression. The Table shows that the survival of businesses finance by MFB is most strongly influenced by 8 predictor variables used for survival analysis. These 8 influential variables are; ability to generate profits, ability to convert profits back into investment, easy access to micro credit, adequate technical capacity, regular contact with lender/loan officers, entrepreneur level of education, regular participation in micro finance programmes, and mandatory micro savings. The most influential predictor variable affecting the survival of businesses is the ability to generate profits on a sustainable basis. Table 5 shows ability to generate profits regularly and easy access to micro credit as the top two prominent predictor variables of survival in our estimated equation. However, based on the Pearson chi-square test of association, both predictor variables are significantly associated with regular participation in microfinance (p 0.001). This shows clearly that the significance of the top two predictor variables is attributed to regular participation in micro finance programme.

This study shows that regular participation in microfinance and regular contact with loan officers are commonly used strategies for accumulating savings, making profits, and ultimately converting capital back into investments. The hazard ratio of the variable no regular participation in micro finance is 1.10. This shows that businesses that do not participate regularly in micro finance are 1.10 times more likely to fail in comparison with businesses that participate regularly in microfinance programme. The hazard ratio of the variable no conversion of profits into investments is 1.88. This shows that businesses that do not have the capacity to convert profits generated into profitable investments for the enterprise are 1.88 times more likely to fail in comparison with businesses that have the capacity to convert profits made into profitable investments. The hazard ratio of the variable ability to generate profits is 7.50. This shows that businesses that failed to generate profits regularly are 7.50 times likely to fail in comparison to businesses that generate profits. The hazard ratio of low technical capacity is 3.08. This shows that businesses with low technical capacity are 3.08 times

likely to fail compare to business with high technical capacity. The hazard ratio of no regular contact with loan officers is 4.73. This shows that businesses with no regular contact with their loan officer are 4.73 times likely to fail compared to businesses that have regular contact with their loan officer. The hazard ratios for businesses that are operated by owners with low levels of education are 3.30 times more likely to fail in comparison with businesses that are operated by owners with a moderate level of education. This implies that formal education is positively correlated with small business survival. The hazard ratio of the variable, no easy access to micro credit is 7.47. This shows that businesses that do not easily access micro credit are 7.47 times more likely to fail than businesses that can easily access micro credit. And lastly, the hazard ratio for the variable, no mandatory savings is 2.76. This shows that businesses that do not participate in mandatory savings are 2.76 times more likely to fail than businesses that are involved in mandatory savings.

The key objective of this aspect of the study is to test the ability of microfinance to enhance small business survival and to identify influential variables that affect the survival of micro and small enterprises (MSEs), particularly assessing the degree of importance of participation in microfinance for promoting viability and long term survival of micro and small enterprises. Each of the 8 predictor variables in Table 5 is highly significant at the 5% level of significance.

Table 6, (see appendix) shows a summary of results obtained for the estimated equation. The log likelihood of 101.493 is high and significant at 5%. Hence we conclude that microfinance enhance survival of small businesses finance by Microfinance Banks in Nigeria.

VII. FINDINGS, CONCLUSION & RECOMMENDATIONS

The main finding of this study is that 90% of MSEs financed by MFBs with track record of regular participation and easy access to micro credit survived up to 4 ½ years in South-West Nigeria. This new result strengthens the argument that MFBs contribute significantly to MSEs survival rate in Nigeria.

Also, the finding from the study revealed that the likelihood of survival of small firms' increases provided the small firms are able to generate profit regularly, have easy access to micro credit and convert profits back into investments. Hence, the level of investments that is made through the partial conversion of profit into investment enables us to relate the survival of small firms to ability to make profits and convert such profit into viable investments. The ability to generate profits regularly aids small firm decision to expand by hiring quality staff which will enhance the growth of the firm. Once growth is feasible, the firm is gradually

moving past survival level, but it all depends on what the firm does with the profits generated. Conversion of profits back into investments is shown to be positively correlated with small business survival and has the potential to ease investment capital and liquidity constraints in business operation. Generation of profits and their conversion into profitable investments are two variables that drive firm growth and survival. In this regard, mandatory savings encourage entrepreneurs to save, which regular participation in microfinance promotes.

The study also shows that formal education has positive impacts on the ability of business owners and operators to conduct business efficiently. The study has shown that a high level of education is indeed a significant factor in increasing operational efficiency, profitability and success of businesses by enabling owners or operators to take calculated risk and arrive at strategically important business decisions at a cost reasonable for the enterprise. It also determines the amount the entrepreneur is able to raise at start up as well (Makasure, 2008). Evidence from the study shows that 81% of businesses whose founder have some form of formal education survived and were very active in business. Only 19% of those without formal education survived. It is unfortunate that the content of the curriculum for vocational training in Nigerian does not prepare potential entrepreneurs adequately for career path in entrepreneurship (Amana, 2003). This constitutes a major obstacle to the growth and development of MSMEs in Nigeria. Technical capacity is also shown to have a significant influence over long term survival of MSEs. This finding is in agreement with the submission of Orji (2006) in which it was reported that successful businesses and enterprises are characterized by owners and operators who are able to demonstrate high technical capacity. Technical capacity could be assessed in terms of ability to adapt to new technology, regular technology related training, application of information and technology, introducing appropriate technologies and expertise, acquiring innovative business skills from rival firms, and staff training in technology. The study also shows that profitability is a key predictor of viability and long term survival. Profitable businesses and enterprises have demonstrated their capacity to survive in competitive environments. In this study, estimated profit was extracted from the customer's record with the bank. This study has shown that the likelihood of firm survival is affected by profitability and circumstances related to profitability at the market place. Successful businesses are significantly associated with the ability to generate profit on a sustainable basis.

Easy access to micro credit is significantly associated with small business survival. Easy access to microfinance is closely associated with regular contact with lender/field/loan officer and regular participation in

micro finance. Regular participation in micro finance activities such as the training session, regular meeting and networking meetings shows the clients commitment to MFB programme, and this enables the client to build good relationships with the loan officer, which eventually culminate into easy access to micro credit. The appropriateness of loan size, proper utilization of loan given and a good repayment plan schedule are the factors that make micro credit worthwhile for small business operators.

VIII. CONCLUSION AND RECOMMENDATIONS

Just like in other parts of the world, entrepreneurs in the small and micro sub-sector of the Nigerian economy require access to finance in order for their businesses to thrive on a sustainable basis. Results from this study show that both financial and non-financial services obtained from MFBs have highly benefited MSEs in Nigeria and have facilitated the sharing of business skills and innovative ideas, and have alleviated the acute shortage of finance to an extent. The policy implication of this study is that micro financing contributes significantly to an enhanced entrepreneurial environment by making the business environment more conducive to small businesses. But small businesses in Nigeria remain at the survival stage of small business development, many of them find it difficult to move to the growth level, the capacity of MFB to finance their growth through investment in technology and asset is in doubt but those are areas for further research. But it is obvious many MSEs are not growing to an extent where they can create sufficient jobs for workers and produce goods for consumers, neither are they making any impact in the international scene nor contributing meaningfully to economic development in Nigeria.

The gap left wide open by formal money lending institutions has been partially filled by micro financing institutions. But there is strong evidence to believe that even the microfinance can only enhance survival of small businesses but not a suitable method of financing for growth and expansion. Contrary to formal money lending institutions, participation in micro finance schemes provides incentive for group members to save, work harder, share business skills and innovative ideas, and utilize scarce resources optimally. The MFBs serve members as a source of financial and social support, but their financial capacity is limited. As a result, users of the banks remain at the survival level incapable of moving to the next stage of business development. Many scholars such as Ojo (2003) and Bekele and Zeleke (2008) have argued that it is prudent to integrate microfinance with other financing window available such as strategic partners or commercial banks. Integration is mutually beneficial to both parties

as it broadens the market base of the commercial banks while providing MSEs with easy access to finance at the same time. This implies that the social capital feature of the banks can help formal financial sectors to expand their lending base at a lesser cost, while MFBs can provide banks with access to a large number of clients with an adequate information base and a collective collateral guarantee.

Collective collateral guarantee enables MFBs to overcome the risk of default, and reduces the high cost of advancing a series of small credits to a large number of MSE operators. The fact that high percentage of MSEs that participated in micro-financing survived shows that it is worthwhile to integrate microfinance schemes with formal financial institutions in order to increase the capacity of MFBs so that they can enlarge their outreach capacity. A robust and positive relationship between participation in micro financing and the survival of MSEs has a strong policy implication on designing support strategies for small businesses and enterprises in Nigeria. Intervention programmes designed for alleviating poverty and promoting small enterprises in Nigeria should use MFBs as a vehicle by having them connected with the bigger formal financial sector. We also recommend recapitalization of MFBs in Nigeria to enable them support MSEs growth adequately. Also, the banks should employ relationship-based financing rather than insisting on a solid business plan only, particularly since regular contact with lender is found to have positive impact on MSEs survival. And Government should establish relevant well adapted and appropriately structured institutions and organizations to provide support for MSEs in such aspect as; procurement, supply and distribution of raw material, supply of local/imported machines for use on concessional terms, training in several technical grades, and create favourable market conditions. They should also set up Tool Design Institute and Testing Centres for raw materials and produced goods/service institute as earlier suggested by Ojo (2006).

REFERENCES RÉFÉRENCES REFERENCIAS

1. Afrane, S. (2002). Impact assessment of microfinance interventions in Ghana and South Africa: A synthesis of major impacts and lessons, *Journal of Microfinance* 4(1), 37- 58.
2. Aderibigbe, J. O. (2001). "The Role of the Federal Sector in Poverty Reduction." *CBN Bullion*, 39(4): 13-24.
3. Akanji, O. O. (2001). "Microfinance as a Strategy for Poverty Reduction." *CBN Bullion*, 39(4): 23-34.
4. Amana, M., (2003). "Addressing Entrepreneurship Development Problems in SMEs". In J. A. T. Ojo. (Ed.), *Small and Medium Enterprises Development and SMIEIS: Effective Implementation Strategies* (pp 71 – 92). Lagos: CIBN Press Ltd.
5. Amin, S., Rai, A. S., Topa, G., (2003). Does Microcredit reach the poor and vulnerable? Evidence from Northern Bangladesh, *Journal of Development Economics*, Vol. 70(1), 59 – 82.
6. Bartlett, J .E., Kotrlik, J.K., and Higgins, C. C. (2001). Organizational research: determining appropriate sample size in survey research, *Information Technology, Learning, and Performance Journal*, 19(1), 5-12.
7. Bekele, E and W. Zeleke, (2008). Factors that affect the long-term survival of micro, small and medium enterprises in Ethiopia. *South African Journal of Economics*, 76 (3), 1-33.
8. Buttehiem, A. M. (2005). Microfinance programmes, empowerment and contraceptive use : Evidence from Indonesia. <http://www.docstoc.com/docs/5491653/microfinance.pdf>. Accessed 23 June 2010.
9. Churchill, N. C., & Lewis, V. L. (1983). The five stages of small business growth. *Harvard Business Review*, 61(3), 30-50.
10. Cochran, W. G. (1977), *Sampling techniques* (3rd ed.), New York, John Wiley & Sons.
11. Copestake, J., S. Bhalotra, and Johnson, S. (2001). Assessing the impact of microcredit: A Zambian case study. *Journal of Development Studies*, 37 (4), 81-100.
12. Cox, D. R. (1972). Regression models and life-tables. *Journal of the Royal Statistical Society*, 34, 187-220.
13. Evans, T.G., and Adams, A.M., (1999). Demystifying non participation in microcredit: A population base analysis, *World Development*, 27(2), 419 – 430.
14. Ehigiamusoe, G., (2005). Tested Institutional Practices for Effective Microfinance Services Delivery. *Proceedings of seminar in microfinance policy, regulatory and supervisory framework for Nigeria*.
15. Iganiga, B. O. (2008). Much ado about nothing: the case of the Nigerian microfinance policy measures, institutions and operations, *Journal of Social Science*, 17(2): 89-101.
16. Johnson, S. & Rogaly, B., (1997). *Microfinance and Poverty Reduction*. London: ACTIONAID, OXFAM, UK.
17. Kauffman, R. and Wang, B., (2001). The success and failure of dotcoms: A multi-method survival analysis. In *Proceedings of the 6th INFORMS Conference on Information Systems and Technology (CIST)*, Miami, FL, USA.
18. Kauffman, R. and Wang, B. (2003). Duration in the digital economy: Empirical bases for the survival of internet firms", In *36th Hawaii International Conference on System Sciences (HICSS)*, Hawaii.
19. Masakure, O., J. Cranfield and S. Henson (2008). "The Financial Performance of Non-farm

- Microenterprises in Ghana," World Development, 36(12), 2733–2762.
20. Ojo, J. A. T. (2003). Partnership and Strategic Alliance Effective SME Development. In J. A. T. Ojo. (Ed.), Small and Medium Enterprises Development and SMIEIS: Effective Implementation Strategies (pp 185 – 212). Lagos: CIBN Press Ltd.
 21. Orji, K. O., (2006). Transforming Microfinance Schemes from Subsistence living to Small Scale Enterprises in Nigeria: analysis of Policies for Integration of Science and Technology into Client's Activities," United Nations Educational, Scientific, and Cultural Organization, Policy paper Number 11, 1-36.
 22. Park, A. and Ren, C., (2001). Microfinance with Chinese characteristics. World Development 29, 39-62.
 23. Portes, A. (1998), Social capital: Its origins and applications in contemporary sociology. Annual Review of Sociology, 24 (1), 1-24.
 24. Ubom, E. E., (2006). Entrepreneurship, small and medium enterprises, theory, practice & policies, Sedina Ltd. Lagos.
 25. USAID (2005). 'Assessment of the Micro, Small and Medium Enterprises Sector in Nigeria: PRISMS: Promoting Improved Sustainable Microfinance Services' <<<http://www.usaid.gov/ng/downloads/reforams/assessmentofthemssectorinnigeria.pdf>. Assessed on Jan. 30, 2008

APPENDIX

Table 1 : Kaplan Meier Survival Estimate by Category Means and Medians for Survival Time

Category	Mean(a)				Median			
	Estimate	Std. Error	95% Confidence Interval		Estimate	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound
Micro Enterprise	4.423	.055	4.316	4.530	5.000	.008	4.984	5.016
Small Scale Enterprise	4.820	.053	4.716	4.925	5.000	.015	4.970	5.030
Overall	4.530	.043	4.445	4.615	5.000	.006	4.988	5.012

a Estimation is limited to the largest survival time if it is censored.

Table 2 : Diagonistic Test Kaplan Meier Estimate Overall Comparisons

	Chi-Square	Df	Sig.
Log Rank (Mantel-Cox)	11.204	1	.001
Breslow (Generalized Wilcoxon)	12.592	1	.000
Tarone-Ware	11.946	1	.001

Test of equality of survival distributions for the different levels of Category.

Table 3 : Kaplan Meier Survival Estimate by Kind of Business Means and Medians for Survival Time

Kind of Business	Mean(a)				Median			
	Estimate	Std. Error	95% Confidence Interval		Estimate	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound
Trading	4.599	.059	4.484	4.714	5.000	.020	4.961	5.039
Artisans	4.365	.123	4.123	4.606	5.000	.029	4.943	5.057
Manufacturing	4.189	.155	3.886	4.492	5.000	.016	4.968	5.032

Agriculture	4.644	.092	4.464	4.825	5.000	.020	4.960	5.040
Service	4.679	.124	4.437	4.921	5.000	.041	4.920	5.080
Overall	4.530	.043	4.445	4.615	5.000	.006	4.988	5.012

a Estimation is limited to the largest survival time if it is censored.

Table 4 : Diagonistic Test Kaplan Meier Estimate by Kind of Business
 Overall Comparisons

	Chi-Square	Df	Sig.
Log Rank (Mantel-Cox)	13.512	5	.019
Breslow (Generalized Wilcoxon)	13.888	5	.016
Tarone-Ware	13.731	5	.017

Test of equality of survival distributions for the different levels of Kind of Business.

Table 5 : Adjusted Hazard Ratios from Cox Proportional Hazard Model
 Variables in the Equation

Predictor Variables	B	SE	Wald	t-value	df	Sig.	Exp(B) Hazard Ratio	95.0% CI for Exp (B)	
								Lower	Upper
No Regular Participation in Microfinance	.098	.025	3.779	3.920	1	.000	1.102	3.450	9.162
No Conversion of profit to investment	.633	.222	3.796	2.851	1	.002	1.883	2.225	7.781
No regular profit	2.105	.376	7.300	5.359	1	.021	7.500	1.133	7.154
Low technical Capacity	1.126	.343	.134	3.283	1	.000	3.083	2.243	8.141
No Regular Contact with Lender/Loan officer	1.555	.391	.158	3.976	1	.006	4.735	1.810	7.164
Low Entrepreneur level of Education	1.196	.296	8.774	4.446	1	.003	3.307	2.245	7.550
No access to Micro-credit	2.011	.224	1.067	8.978	1	.031	7.471	1.778	6.066
No Mandatory Micro-savings	1.016	.210	.006	4.838	1	.001	2.762	2.073	8.711

Source: Authors' computations from study sample

Table 6 : Overall Statistics for Cox Regression
 Omnibus Tests of Model Coefficients(a,b)

-2 Log Likelihood	Overall (score)			Change From Previous Step			Change From Previous Block		
	Chi-square	Df	Sig.	Chi-square	df	Sig.	Chi-square	Df	Sig.
101.493	29.347	.002	11	29.463	.002	11	29.463	.002	11

a Beginning Block Number 0, initial Log Likelihood function: -2 Log likelihood: 130.956

b Beginning Block Number 1. Method = Enter