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Entrepreneurs Health and Productivity in Nigeria: Analysis of Microfinance Bank Contribution

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I. Introduction

The provision of health services for all in Nigeria has been a growing concern to both the government and the private sector. The huge investment by the government in the sector over the years has not yielded any meaningful result. It has been realized in the recent years that there are limits to which government can singularly provide health care services for all especially in Nigeria where provision of health care services are becoming increasingly difficult to accomplish. Nigeria as a nation has many developmental challenges which have affected all sectors in the economy, the health sector inclusive. In recent times many microfinance institutions are integrating health protection services in their microfinance support services. Studies have shown that microfinance institutions (MFIs) are capable of contributing to health improvements by increasing knowledge that leads to behavioural changes, and enhances access to health services through addressing financial, geographic and other barriers (Oxford journal health policy, 2011). In the past few years, microfinance has been widely acknowledged as a successful contributor to the alleviation of poverty and a valuable tool for achieving the Millennium Development Goals. While access to financial services is undeniably powerful, credit and savings products address only an aspect of poverty which is not sufficient to tackle serious difficulties the poor go through when struck with illness and disease. Poverty and ill health are intertwined and, as such, must be addressed together. The poor are unable to afford health care when they are injured or ill, as a result, the poorer the clientele, the more difficult it is to obtain basic preventive and curative health services, and the higher the morbidity and mortality rates. A vicious cycle of poverty and ill health affects the ability of MFI clients to engage in productive activity, repay loans taken from the bank, build assets and grow their businesses, which are the conditions necessary for pulling out of poverty. As clients are unable to repay their loans and continue borrowing, MFI sustainability can also be affected.

The ability of the microfinance bank clients to access timely and effective health services, can improve their likelihood of preventing disease, recovery from ill health and enhance continuous productivity. MFIs can help realize this change and bring an end to the trap of poverty and ill health by integrating innovative health protection services that leverage the institution's financial services and further its social mission. That is, integration of financial and health related services become valuable to clients and MFIs along social and financial dimensions (Ostradicky, 2010). Microfinance Institutions has enormous potential as a financially viable mechanism for reaching poor, rural people with simple but life-saving health protection services. Microfinance banks clients' productivity is enhanced when they are healthier and have more knowledge and options to protect their health. Well-established microfinance banks have integrated valuable health-related programs such as health savings, health loans, health insurance, health education, group discounts with health providers, mobile healthcare in rural villages, distribution of insecticide-treated mosquito nets, and much more to their clients at low or no cost to the bank

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itself. It is therefore necessary at this junction to undertake an assessment of the extent to which health related services provided by microfinance banks enhance the productivity of entrepreneurs. A number of studies have been carried out on the impact of microfinance on poverty alleviation, some scholars focused on the mechanism by which poverty is reduced. Copestake, Halotra and Johnson (2001) analysed the impact of microfinance on firm and individual well being. Copestake et al. (2001) focused on business performance and household income to establish a link between the availability of microfinance and overall wellbeing of the poor. 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. Buttenheim (2008) examines the relationship between microfinance programs, women empowerment and use of contraceptive, he concludes that microfinance program participation and availability do not uniformly increase contraceptive use, but rather increase a woman's ability to achieve her fertility preferences as measured by desire for more children. Despite popular claims that microfinance has many nonfinancial impacts, it is not expected that microfinance alone impact non-financial knowledge, behaviours and outcomes such as relate to health. The effects on health most likely would be indirect, through improvement of financial ability to access education and health care. Karlan and Morduch (2010) state in a recently published and broad review of microfinance that the evidence so far indicates that finance interventions alone may not be as powerful as 'finance coupled with other interventions such as training and healthcare. A small but growing number of studies that integrate microfinance with other non-financial services seems to support the argument that MFI financial services have positive impacts beyond the direct financial benefit, such as women's empowerment and decision making agency (Manderson and Mark 1997; Kim et al. 2007), nutritional status of children (Dunford and MkNelly, 2002) and health outcomes, including use of contraceptives, higher child-survival rates, reduced family violence and increased use of health services (Mohindra 2008). Nonetheless, most MFIs have naturally chosen to focus where their competencies are strongest, on microenterprise credit.

There is no doubt that microfinance has increased both in research and practice, in spite of this emphasis, current research did not provide sufficient justification for the link between microfinance health services and entrepreneurs' productivity in developing countries. Besides, the empirical evidence emerging from various studies on the overall effect of microfinance have so far yielded mixed results that are inconclusive and contradictory. The question of whether microfinance health services improves or worsen entrepreneurs productivity is worthy of researching into like we have in this study. In addition, the impact of microfinance health related services on entrepreneurs' productivity has not received research attention in Nigeria. Research also shows that most of the studies on impact assessment of microfinance that were reported were carried out in industrialized countries. This means that there is a major gap in the relevant literature on developing countries, particularly Nigeria that is yet to be covered. This study attempts to fill this gap by studying the situation in Nigeria and providing evidence on the effects of microfinance health related services on Entrepreneurs productivity in Nigeria. It is therefore necessary at this junction to undertake an assessment of the extent to which health related services provided by Microfinance Banks enhance Entrepreneurs productivity in Nigeria. That is the overall objective of this paper. The specific objectives are: (i) ascertain the relationship between health education and entrepreneurs' productivity (ii) examine the effects of health related services provided by microfinance banks on the productivity of micro and small entrepreneur in Nigeria (iii) create awareness of the involvement of microfinance institution in provision of basic health services in Nigeria. In order to achieve the above stated objectives, the following research questions are advanced: (i) Is there a relationship between health education received by entrepreneurs and Entrepreneurs productivity? (ii) To what extent does microfinance health related services enhance productivity of micro and small entrepreneurs in Nigeria? (iii) What are the prospects of microfinance banks in provision of health related services in Nigeria? The following null hypotheses are proposed and tested in the course of this study. (i). There is no significant relationship between health education and entrepreneurs' productivity in Nigeria. (ii). Health related services provided by Microfinance banks has no significant effect on the level of productivity of Entrepreneurs in Nigeria. (iii). Microfinance banks' contributions to the provision of health service is not significant.

II. Literature Review

The term 'microfinance' refers to the full range of financial services that low-income people use, including not only credit but also savings, insurance and money transfers. Microfinance institutions (MFIs), as well as development non-government organizations (NGOs) with a strong microfinance component, are increasingly recognized for their capacity to provide effective and sustainable programmes to reduce poverty and associated vulnerabilities such as food insecurity among the world's poorest people (Leatherman, Metcalfe,Geissler and Dunford, 2010). Microfinance has existed, although mostly in the shadows and unseen by casual observers, since the rise of formal financial systems, and indeed probably predates them. It has only been within the last four decades, however, that serious global efforts have been made to formalize

financial service provision to the poor. This process began in earnest around the early to mid-1980s and has since gathered an impressive momentum (Brau and Woller, 2004). Copestake et al. (2001) finds that borrowers who were able to obtain two loans experienced high growth in profits and household income compared to a control sample, but borrowers who never qualified for the second loan were actually worse off due to MFI collection mechanisms. Wydick (1999) finds that upward class structure mobility increases significantly with access to credit. Using the same Guatemala data set in a subsequent study (2002), Wydick also finds that rapid gains in job creation after initial credit access were followed by prolonged periods of stagnant job creation. Dunn (2001) finds that program clients' enterprises performed better than non-client enterprises in terms of profits, fixed assets, and employment.

On health related services impact studies, several studies show that when families have fallen into poverty or remain trapped there, ill health often emerges as a key reason (Narayan 2000; Dodd and Munck 2002). MFI managers clearly see the effects of these health problems on the performance of their clients and more generally on the lives of their households and communities. Moved by their dedication to a social mission as well as the business imperative to have healthy clients, some MFIs have adopted a strategy of offering health-related programmes, including one or more of the following: health-related education (including nutrition and sanitation), health care financing (such as health loans or savings accounts), training community health workers, direct delivery of clinical services, and health microinsurance (Leatherman et al., 2010).

Recognizing the vicious cycle of poverty and ill health, and the impact on clients' abilities to repay loans, build assets and pull themselves out of poverty, some microfinance institutions have added nonfinancial services, such as dialogue-based education and a range of health related services and products. In order to make sense of a diffuse and ill-defined field, we propose a simple conceptualization of three principle barriers to microfinance clients utilizing health-related services in resource-poor countries: Knowledge that is, awareness and information for behavior change, (ii), affordability that is financial ability to pay for health care, (iii), availability, that is, convenience of access to effective and safe health services and products.

Freedom from hunger (2006) identified four areas of microfinance health related services. The four broad categories are; health education, health finance, linkages to health provider and access to health products. Health education variables include seminars and workshop on health care, health promotion and screening, training of community health volunteers and circulation of health related pamphlet and leaflets. Factors related to health finance are general health savings, health loan, health insurance, and special saving account for surgical procedure. Distance, quality and affordability can be major barriers to timely health care for MFI clients, particularly those in rural areas, where providers are sparse, transportation is difficult, and public develop expertise in health care is scare. The factors related to linkages with health providers are group discounts with health providers, mobile healthcare in rural villages, negotiation of special rates, advocacy for better quality health care and accessibility to health care by providing transport arrangement for health workers in villages. Lastly, access to health care products involve distribution of insecticide-treated mosquito nets, providing affordable financing to enable purchase of higher-costing health products; directly furnishing basic preventive and curative health products, enabling access to products through linkages with health providers and health product manufacturer. These four categories of variables account for most of the health related services provided by Microfinance Institutions.

Health education common health topics are malaria fever, diarrhea, HIV/AIDS, breastfeeding, healthy habits, women's sexual and reproductive health, planning for better health, and using health care services. The objectives of health education are prevent and appropriately treat common illnesses, commit to breastfeeding and breastfeeding exclusively for six months, adopt healthy habits to ward off chronic disease, engage in healthy practices for the well-being of mother and baby, prepare their families to cope with the financial impact of illness, and make the most out of available health services.

III. Productivity

Productivity is the measure of how specified resources are managed to accomplish timely objectives as stated in terms of quantity and quality. Productivity may also be defined as an index that measures output (goods and services) relative to the input (labor, materials, energy, etc., used to produce the output). Hence, there are two major ways to increase productivity: increase the numerator (output) or decrease the denominator (input). (Planert, 2000).

Productivity is useful as a relative measure of actual output of production compared to the actual input of resources, measured across time or against common entities. As output increases for a level of input, or as the amount of input decreases for a constant level of output, an increase in productivity occurs. Therefore, a "productivity measure" describes how well the resources of an organization are being used to produce input (Inman, 2001). Productivity is usually expressed in one of three forms: partial factor productivity, multifactor productivity, and total productivity.

The standard definition of productivity is actually what is known as a partial factor measure of productivity, in the sense that it only considers a single input in the ratio. The formula then for partial factor

productivity would be the ratio of total output to a single input. Other partial factor measure options could appear as output/labor, output/machine, output/capital, or output/energy. Terms applied to some other partial factor measures include capital productivity (using machine hours or dollars invested), energy productivity (using kilowatt hours), and materials productivity (using inventory dollars). While a multifactor productivity measure utilizes more than a single factor, for example, both labor and capital. Hence, multifactor productivity is the ratio of total output to a subset of inputs: a subset of inputs might consist of only labor and materials or it could include capital. Obviously, the different factors must be measured in the same units, for example dollars or standard hours (Stevenson, 1999).

IV. Research Methodology

The study adopts a combination of survey-based data collection using a well structured questionnaire administered to MFBs customers and an in-depth interview session with the bank officials who are directly responsible for providing health related services in the respective MFBs, as well as Focus Group Discussion (FGD) with the MFBs clients. The purpose of such combination is to obtain cross-referencing data and independent confirmation of data, as well as a range of opinions. The theoretical population of the study consists of the entire MSEs in the country. However, the study was restricted to South-West geo-political 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 nerve centre of the nation. For effective coverage and lower cost, purposive sampling technique was used to select the banks offering health related services, while simple random sampling technique was used to selected bank clients that participate regularly in microfinance programme for a period of at least two years. A total of 623 entrepreneurs were selected for the study. 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, logicality 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 Pearson Correlation Coefficient and Multiple 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 53 Microfinance Banks were used for the study and the copies of questionnaire were distributed at an average of twelve (12) copies of questionnaire per Bank.

V. Model Specification

The model specification used in this study was based on the hypotheses of the study. This statistical model is presented below to examine the extent to which micro finance banks health related services have enhanced the productivity of Entrepreneurs in Nigeria. The model adopted for this study was developed from the work of Fasoranti, Akinrinola, and Ajibefun (2006) they examined the impact of microcredit and training on efficiency and productivity of small scale entrepreneurs. The model was adapted and modified for this study.

$$Y = f(OC, FC, MFC) \quad \ldots\ldots\ldots\ldots \quad (1)$$

Model 1 transform into model 2 below

$$Y = \alpha_o + \beta_1 OC_1 + \beta_2 FC + \beta_3 MF + u_1 \quad \ldots\ldots\ldots \quad (2)$$

Model 2 transform into model 3 below

$$Y = \alpha_o + \beta_1 EAge_1 + \beta_2 EE_2 + \beta_3 Bizloc_3 + \beta_4 Biz\, reg_4 + \beta_5 HE_5 + \beta_6 HF_6 + \beta_7 LinH_7 + \beta_8 AH_8 + u_1 \ldots\ldots \quad (3)$$

Where,

Y = dependent variable (SMEs productivity). Productivity is measured as output value (sales value) over resource input value. Resource input is measured as cost of capital at time t, wages and salary paid at time t, rent paid at time t, electricity paid at time t, and cost of machine maintenance at time t Otokiti (2002).

αo = constant

f = a function to be specified

The independent variables which are key predictor of MSE productivity is given as;

OC = Owners characteristics variables, included in this study are: EAge1 = Entrepreneur Age, EE2 = Entrepreneur Education,
FC = Firm Characteristics variables, included for this study are: Bizloc3= Business location, and Biz reg4 = Business registration.
And finally is the MF = Microfinance variables, included for this study are: HE5 = Health Education, HF6 = Health Finance, LinH7 = Linkage to Health service providers, AH8 = Access to Health products.

VI. Discussion of Result

a) *Business Charactersitics Of Respondents*

Table 1 (see appendix) shows that 239 (47.6%) of the businesses had been in existence for five years, 195(38.8%) had been in existence for about 6 – 10 years, 56 (11.2%) had been in existence for between 11 – 15 years, 10 (2.0%) had been in existence for between 16-20 years, while only 2 (0.4%) had been in existence for a period more than twenty years. The majority in the five years time frame implies that the businesses started just around the same time the MFB was officially introduced into the Nigeria financial system. Meaning that the existence of these banks are a catalyst to business start-up five years ago and are also contributive to the growth of the new businesses as well as the expansion of the old ones.

On the type of business, the field survey revealed that 238 (47.4%) are involved in trading, particularly retail trading. This confirmed the 2001 country survey carried out by the CBN, where wholesale and retail trading accounted for 49% of non-agriculture microenterprise in Nigeria. This situation is largely due to the fact that retail trading does not require any special skill to start. Also, the dominance of Lagos State in the field survey may be another reason, Lagos State being the commercial nerve centre for the country. It was observed that 86 (17.1%) are artisans, including people involved in hair-dressing, furniture making, tailoring, mechanics, vulcanizers, fashion designing, brick laying, etc. 33 (6.6%) are involved in service industry' the majority of people in this category are people involved in the sale of recharge cards, operators of business centres, providers of educational services, food vendors, etc. Only 54 (10.8%) and 89 (17.7%) are involved in manufacturing and agricultural businesses respectively. This calls for concern, If out of five hundred and two respondents only 54 are involved in production of goods, it is a pointer to the fact that the nation has a long way to go in terms of real economic growth, because no nation develop on mercantile trading and commerce alone. Most of the businesses are sole ownership. 420 (83.7%), a typical micro enterprise is operated by a sole proprietor/manager aided mainly by unpaid family members and occasional paid employee and/or apprentice. Fifty six (representing 11.2%) are family businesses, 24 (4.8%) are partnership businesses, while 2 (0.4%) are other types of business formation. This is to buttress the fact that most of the businesses supported by MFB are one-man businesses which are expected to grow to other forms, such as partnership business or limited liability Company after some years. In relation to the registration status of the businesses, the analysis revealed that 331 (65.9%) are not registered businesses, while only 171 (34.1%) are registered businesses. This may be as a result of bureaucratic bottleneck involved in registration of businesses and the dominance of microenterprise in the survey. The survey revealed that 367 (73.1%) are micro enterprises, using the 2007 National policy on MSMEs classification. 135 (26.9%) are small scale enterprise. The 2001 country survey revealed that most micro enterprises in Nigeria operate in the informal sector, meaning that they are most not registered business. It is in recent time that the MFBs are persuading business owners to at least register their business name.

The table also shows the sources of initial capital of the respondents, 388 (77.4%) started their business with their personal savings, 61(12.2%) started with borrowed funds from friends and family, 13 (2.6%) started with a loan from the bank, while 39 (7.8%) started with gifts and grants obtained from friends and institutions. This confirms the fact that funding for most microenterprises is mainly from individual resources, with a little help from family and traditional mutual fund societies such as Rotational Savings and credit Association (ROSCA). Bank loans are rarely sought and more rarely obtained. The research tried to find out the composition of the initial capital to know the likely capital structure of small business in South West Nigeria. The study revealed that 266 (53%) is purely owners equity, that is the entrepreneur rely mainly on their personally generated funds to finance their businesses. The implication of this is that their growth and expansion is limited in size. Table 4.14 also reveals that 135 (26.9%) combined owners equity and loan which makes for business growth if they are combined in appropriate proportion. Also, 101 (20.1%) make use of loan alone. This implies that such entrepreneurs do not have any stake in the business and as a result, he/she may not be enthusiastic towards ensuring business growth.

The research also strived to know what motivate the respondents to start their businesses. The result obtained reveals that to gain financial independence is the main reasons why many Entrepreneurs start their own businesses. 283(56.4%) indicated financial independence, 126(25.1) indicated loss of job, 79 (15.7%) to bequeath to their children and 14 (2.8%) gave other reasons such as for self actualization and for economic reasons. The research also discovered that most of the businesses are located in the urban areas 396 (78.9%), the dominance of Lagos in the survey explains this. 106 (21.1%) located in the rural area.

b) *Relationship between Entrepreneurs Productivity and Heath Services*

Hypothesis 1 : Is there a relationship between health services and Entrepreneurs' productivity.

Table 2 : Correlation test between the Health Service and Entrepreneurs Productivity

		Health Services	Entrepreneurs Productivity
Microloan	Pearson Correlation	1	.331(**)
	Sig. (2-tailed)		.001
	N	502	502
Business expansion	Pearson Correlation	.331(**)	1
	Sig. (2-tailed)	.001	
	N	502	502

Source: Field Survey (2010)

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

The first hypothesis is to find out if there is a relationship between health services provided by microfinance banks and Entrepreneurs productivity. Health services here are the combination of health education, health finance, linkage to health service provider and access to health product. Therefore, we tried to find out the direction and the significant level of the relationship that exit between the two variables using the Pearson correlation test. With SPSS, we computed a Pearson correlation test between the two variables, health service provided and Entrepreneurs' productivity. The result obtained as shown in Table 2 (see appendix) shows that there are 502 cases which implies that there are no missing cases. The Table also shows a correlation coefficient of .331 and it is positive, this implies that the Pearson correlation coefficient of (.331) is positive indicating a low correlation between health services provided by micro finance banks and Entrepreneurs' productivity, that is, health related services provided by MFBs contribute significantly to Entrepreneurs productivity in Nigeria but its level of contribution is still at the low level. The coefficient of determination which is the square of the r indicate 10.9%, that is health services provided by MFBs contributes only 10.9% to Entrepreneurs productivity in South west Nigeria which is very low, but has a positive contribution. This is significant at 1% significant level. Therefore, our null hypothesis which is there is no significant relationship between health service provided by MFBs and Entrepreneurs' productivity is rejected, while we accept our alternative hypothesis, that is, there is a significant relationship between health services provided by MFBs and Entrepreneurs' productivity in Nigeria. We therefore conclude that health related services provided by MFBs help to enhance the productivity of Entrepreneurs in Nigeria.

The relationship between health services provided by MFBs and Entrepreneurs' productivity in Nigeria was investigated using Pearson product moment correlation coefficient. Preliminary analysis was performed to ensure no violation of the assumption of normality, linearity homoscedasticity. There is a low positive correlation between the two variables, r = .33, n = 502, p< .0005, with low level of Entrepreneurs productivity associated with positive but low level of MFB health related service.

c) Multiple Regression Analysis of Effect of Microfinance Health Service on Small Business Operators Productivity by Category.

Table 3 below presents results from the regression of microfinance health related service variables on entrepreneur's productivity. The result in column I of the Table represents the total sample. In columns II and III we split the sample into small and micro firms. Column II presents observations for small firms (i.e. firms with more than 10 employees) and column III presents observations for micro firms (i.e. firms with less than 10 employees). The constant, which is also the intercept, reveals that when all the variables are zero, the entrepreneur's productivity will be 37.7% for the total sample and 17.9% and 8.6% for small and micro firms respectively. The result obtained is significant at 1%. The coefficient for entrepreneur's age is negative and significant at 1% for the total sample and 5% for small firms and micro firms. This is expected: as the entrepreneur advances in age, he becomes less productive. The result shows that when an entrepreneur's education increases by one unit, his productivity will increase by 7.7 units for the total sample and by 6.2 and 8.6 units for small and micro firms respectively. The result obtained is significant at 1% for the total sample and small firms and is significant at 5% for micro firms. This implies that education has a positive correlation with productivity; the significance of education hinges on the fact that it enhances the stock of human knowledge and management skills which consequently enhance productivity. This confirms the findings of Fasoroti et al., (2006) that the entrepreneur's level of education enhances productivity.

On firm characteristics variables, the coefficient for business location (urban) is positive and significant

at 5% for total sample and small firm sample respectively, but not significant for micro firms, while the coefficient for business location (rural) is positive but not significant for the three samples. On effects of business registration on entrepreneurs' productivity, registration of business tends to be size-based. The coefficient for business registration is positive and significant for the total sample and small firms at 1% and 5% significance level, but positive and insignificant for the micro firm sample. In small firms, registration enhances credibility, opens up access to rationed resources and reduces transaction cost, thus enhancing the growth and productivity of the firm. In micro firms on the other hand, registration may not enhance productivity appreciably. For instance, operating outside the purview of government affords firms more flexibility in input use as local conditions change (Sleuwagen and Goedhuys, 2002).

On micro finance health related variables, the coefficient for health education shows that a unit increase in health education service provided by MFB increases the Entrepreneurs' productivity by 5.0, 3.1 and 2.0 units for total, small and micro samples ant they are all significant at 1% for total sample and 5% for small and micro samples. This implies that health education service provided by MFBs such as seminars/workshops, health screening and circulation of education related pamphlets goes a long way to affect Entrepreneurs productivity positively. Any training programme properly, well structured and diligently provided enhances entrepreneurs productivity (Fasoranti, 2006).

The coefficient for health finance is positive and significant for total sample and micro firms at 10% significant level. The result shows that health finance significantly affects the Entrepreneur's productivity in the total sample and micro firm's sample, but it is not insignificant for the small firm sample. This implies that health finance service provided by MFBs is not commensurate to the business activities of small firm operators. The result obtained on linkages with health services provider (such as group discounts with health providers, mobile healthcare in rural villages, negotiation of special rates, advocacy for better quality health care and accessibility to health care by providing transport arrangement for health workers in villages) is positive but not significant for the three samples, this is understandable for many reason, the MFBs are currently facing a lot of problems. The result on access to health service product also is positive but not significant for the three samples. Most of the MFBs are not keen in providing such services now crisis in the Microfinance subsector is clouding most of the activities of the banks.

The coefficient of determination, that is, the adjusted R^2 for the three samples are 0.48, 0.22 and 0.52 for the total sample, small firm and micro firms respectively. This is acceptable for a cross-sectional data, like we have for this study. The overall statistic is significant at 1% for the total sample and the micro samples but not for the small firm sample. The decision rule is that when calculated F-value is significant we reject the null hypothesis and accept the alternative hypothesis. We therefore conclude that, health related services provided by MFBs enhance the productivity of micro entrepreneurs especially and the factors that positively affect entrepreneur's productivity are Entrepreneurs' education, business location (urban), business registration, health education and to an extent health finance while other factors such as linkage with health service provider, and access to health products are not significant in South West Nigeria. This is in line with the conclusion reached by Fasoranti (2006) that the significant determinants of technical efficiencies of bakers, furniture makers and burnt brick makers were age of operators, business experience, and level of education, training experience, credit access, working capital and initial capital outlay. And that well structured entrepreneurship training programmes complemented with easy credit access can facilitate the desired improvement in the efficiencies of small scale business people.

VII. Findings

a) Microfinance and Entrepreneurs' Productivity

The result obtained on this aspect of the study shows the magnitude of beta coefficient for owners' characteristics variables Entrepreneurs' Education, some firm characteristics variables such as business location (urban) and business registration, and MFB health related service such as health education and health finance are found to have significant effects on entrepreneurial productivity for the total sample in South-West Nigeria. When the sample was split into small firms and micro firms, the same variables were seen to have significant impact on entrepreneur's productivity, but the order of impact varies significantly. The overall statistics of 4.119, 1.218 and 3.103 for total sample, small firm and micro firm respectively led to our decision to reject our null hypothesis for total sample and micro loan and accept our null hypothesis for small firm samples. Our null hypothesis states that MFBs health related services does not have significant effects on Entrepreneurs level of productivity in South-West Nigeria.

VIII. Conclusion and Recommendations

The international development community has shown keen interest and enthusiastic support for microfinance programs in recent decades. With its emphasis on poverty alleviation, family welfare, women's empowerment and entrepreneurial development, the practice of microfinance certainly offers considerable promise for improving the health and livelihood of many of the world's poor. In recent times many MFIs are offering health related services to compliment the

financial services as health issues are found to have effect on individual poverty level. This paper has attempted to add to the microfinance program evaluation literature in the following areas.

First, the study explore in details the probable relationship between health related services provided by microfinance banks and the Entrepreneurs productivity and goes further to examine the specific factors that that affects entrepreneurs productivity in Nigeria. In doing so the study finds compelling evidence that there is a significant positive relationship between health services provided by MFBs and entrepreneurs productivity in Nigeria. This is a departure from much of the microfinance literature that links participation in microfinance programme to poverty alleviation without finding out the specific factors that makes for poverty alleviation. While the study finds that there is a positive relationship between microfinance health services and entrepreneurs productivity, the study reveals specifically that microfinance health related services do not have significant impact of productivity level of small scale entrepreneurs'. It would be fruitful in future studies to explore the other hypothetical pathways between microfinance programs and probably reproductive health outcomes.

Secondly, the study extends the literature on microfinance programs and entrepreneurs productivity in Nigeria, a country with high poverty index and poor health service delivery. Due to different gender dynamics, cultural influences, economic environments and program approaches to health care service in Nigeria, the study has succeeded to find the linkages between microfinance health services and entrepreneurs productivity.

The international development community has shown keen interest in and enthusiastic support for microfinance programs in recent decades. With its emphasis on poverty alleviation, family welfare, women's empowerment and entrepreneurial development, the practice of microfinance certainly offers considerable promise for improving the health and livelihood of many of the world's poor. In recent times many MFIs are offering health related services to compliment the financial services as health issues are found to have effect on individual poverty level. This paper has attempted to add to the microfinance program evaluation literature in the following areas.

First, the study explore in details if there is any relationship between health related services provided by microfinance banks and the Entrepreneurs productivity and goes further to examine the specific factors that that affects entrepreneurs productivity in Nigeria. In doing so the study finds compelling evidence that there is a significant positive relationship between health services provided by MFBs and entrepreneurs productivity in Nigeria. This is a departure from much of the microfinance literature that links participation in microfinance programme to poverty alleviation without finding out the specific factors that makes for poverty alleviation. While the study finds that there is a positive relationship between microfinance health services and entrepreneurs productivity, the study reveals specifically that microfinance health related services do not have significant impact of productivity level of small scale entrepreneurs'. It would be fruitful in future studies to explore the other hypothesized pathways between microfinance programs and probably reproductive health outcomes.

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In this study, we have estimated the effects of MFBs health related services on entrepreneurs' productivity and the significant policy variables influencing the productivity of small and micro entrepreneurs in Nigeria. Our findings show that there exist some level of inter and intra group variations of productivity among various sectors and categories examined. This signals that there is room for improvement in productivity of micro and small business entrepreneurs in Nigeria. Among small scale entrepreneurs' the significant variables are Entrepreneurs education, business location and business registration, same variables applies for micro entrepreneurs. We conclude that a well structured health education and innovative health finance services enhance productivity of micro and small scale entrepreneurs in Nigeria. We therefore recommend that;

1. Health related services offered by MFBs especially health education and health finance should be well entrench into MFBs services. The significance of health education is that it helps to bring about behavioural changes in Entrepreneurs which goes a long way to enhance their productivity. Also the Microfinance Banks should be recapitalize to enable them provide more health finance entrepreneurs on easy terms.
2. MFBs should assist their clients by providing health education and provide information on government health programmes in the country. Such MFBs health related service should be strengthened and properly funded and delivered too. MFBs can partner with health organizations such as health care centres to provide client-focused health education to their clients.
3. Banks should engage in target site selection and means testing before they are sited in a particular location. This will enable the banks to develop appropriate health financial product that will suit the need of the entrepreneurs in a particular location

rather than offering blanket services that will not have positive impact on Entrepreneurs productivity and performance.

4. Entrepreneur's level of education is found to have positive effects on entrepreneurs' productivity; Entrepreneurs should therefore be encouraged by the MFBs to improve on their current level of education by engaging in adult education or life-long learning; as this will have the potency to increase their level of productivity.
5. MFBs can partner with Insurance Companies in the country to provide quality health insurance services affordable to MFBs' client. This will guarantee the clients' access to health services when the need arise.

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Appendix

Table 1 : Business Charactersitics Of Respondents

Variable	Measuring group	Frequency	%
Year Business Established	5 years	239	47.6
	6 – 10 years	195	38.8
	11 – 15 years	56	11.2
	16 – 20 years	10	2.0
	Above 20 years	2	0.4
	Total	502	100
When did you open account with MFB/community Bank?	Above 10 years	76	15.1
	7 – 9 year	138	27.5
	5 - 6 years	262	52.2
	3 – 4 years	26	0.5
	Total	502	100
Kind of Business	Trading	238	47.4
	Artisan	86	17.1
	Manufacturing	54	10.7
	Agriculture	89	17.7
	Service	33	6.6
	Others	2	.4
	Total	502	100
Form of Business	Sole ownership	420	83.7
	Family Business	56	11.2
	Partnership	24	4.8
	Other type	2	0.4
	Total	502	100
Source of Initial Capital	Personal Savings	388	77.4
	Borrowed from friends	61	12.2
	Loan from bank	13	2.6
	Gift & Grant	39	7.8
	Total	502	100
Registration of Business	Yes	171	34.1
	No	331	65.9
	Total	502	100
Category of Business	Micro	367	73.2
	Small	135	26.8
	Total	502	100
Business Location	Urban Area	396	78.9
	Rural area	106	21.1
	Total	502	100
Motivation for starting a business	Financial independence	283	56.4
	Loss of Job	126	25.1
	To bequeath to children	79	15.7
	Others	14	2.8
	Total	502	100

Source : Field survey, 2010

Table 3 : Multiple Regression Analysis of Effects of Microfinance health Services on Entrepreneurs' Productivity by Category.

	Column I Total Sample Coefficient t- stati		Column II Small Firms Coefficient t- stati		Column III Micro Firms Coefficient t- stati	
Constant	37.709*	3.962	17.907*	7.184	8.692*	5.008
Owners Characteristics						
Entrepreneur's Age	-0.152*	-1.813	-2.217**	-1.958	-0.195**	-1.737
Owners Education	7.752*	3.613	6.266**	1.618	8.695**	1.577
Firm Characteristics						
Business location (Urban)	0.003**	2.169	0.058**	1.725	1.019	1.164
Business location (Rural)	0.023	1.169	0.018	1.025	0.021	0.964
Business registration	4.026*	3.152	0.092**	2.041	1.065	1.003
Microfinance Characteristics						
Health Education	5.030*	3.393	3.165**	2.011	2.014**	1.598
Health Finance	1.003***	1.887	1.802	1.448	1.108***	1.972
Linkage to health providers	0.079	1.128	1.111	1.021	0.016	1.014
Access to health products	0.448	1.112	0.046	1.031	0.031	0.916
R – squared	0.597		0.321		0.611	
Adjusted R-Squared	0.481		0.226		0.527	
No. of Observation	502		135		367	
F-test statistics	4.119(0.000)		1.218(0.081)		3.013(0.000)	

Source : Field survey, 2010. Note =1% level of significance, ** = 5% level of significance, *** = 10% level of significance*

The effect analysis of microfinance health service on Entrepreneurs' productivity. Productivity is measured as output over resource input at time t. The result of the total sample is presented in column I, the data is later split into two, result of firms with equal or more than 10 employees is presented in column II i.e (small firms), while result of firms with less than 10 employees (i.e micro firms) is presented in column III.

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