Money related imperatives and enterprising action decision among customers of miniature account organizations in Jimma territory

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Abstract

The research is intended to assess the small holder entrepreneurs' enterprise choices under financial constraint. Adapting economic model of household-production interactions, results from a survey of 140 smallholders was used on multinomial logit regression techniques. The paper makes the case that the access to finance has limited effect on the choice of entrepreneurial activity than individual differences did. It was also found that majority of the problems the entrepreneurs faced have no significant association with access to credit rather with macroeconomic and institutional factors. There has also been strong association of human capital, physical and social capital with entrepreneurial activity choice, implying enhancement of smallholder's entrepreneurship need to take into account other socio-economic factors besides the access to credit. The activity analysis has also showed that there is an out-flock of entrepreneurs from agriculture to non agricultural sector which would have a critical implication on the country's endeavor to food security. Generally, the study reveals sets of key variables relevant to the smallholders' entrepreneurial activity choice, and provides an evaluation of intensity of the effects of the variables. The paper concludes by bringing these critical insights to bear on possibilities for designing microfinance programs that would help flourish smallholder entrepreneurship which would gear towards realization of the country's long run development plan.

Keywords: Entrepreneurship, activity choice, micro finance.

INTRODUCTION

Background and justification

Sub-Saharan Africa as a whole remains the world's most technologically backward, food-insecure and politically instable region with a considerable part of the population remain undernourished. However, recently, countries like Ethiopia have been growing at a relatively fast rate, which in turn has led to improvements in several areas such as trade, mobilization of government revenue, infrastructure development, and the provision of social services (UNCTAD, 2012). Nonetheless, sustainability of the economic progress and diversification of potential sectors requires technical progress tailored to the country's varied agro-ecologies, development of supporting
institutions and moreover boosting entrepreneurial skill of
the smallholders\textsuperscript{1}. It has been suggested as way to break
the poverty trap is to encourage petty entrepreneurship
among the poor, in order to foster production surpluses
and hence economic progress in the region (Khalid,
2003; Naude, 2010).

Currently, global development is entering a phase
where entrepreneurship will increasingly contribute to
economic development by facilitating self employment,
income distribution and competition. Entrepreneurship in
this context pertains to the actions of a risk taker, a
creative venture in to a new business or the one who
revives on existing business. The rapid ascent of
emerging markets has sparked a renewed interest in
understanding the role entrepreneurs play in shaping the
transformation of developing countries, and what
determines smallholders' entrepreneurship (Andre\textsuperscript{\textdegree} van et
al., 2005; Antoinette, 2009). There is ample evidence that
entrepreneurship is a key factor for economic development by carrying out innovation specifically in the
flourishing of small businesses (Levine 1997; Naude,
2010).

In contrast to the old 'top down' development, the
current approach which emerged over the past decade is
the development 'from below'. This approach assumes
that development is based on stimulating local
entrepreneurial talent and subsequent growth of
indigenous companies. Despite several interventions by
the government and various development practitioners to
improve the livelihoods of smallholders, in Ethiopia, the
issue of small scale entrepreneurship development
remains a key challenge (Khalid, 2003). This partly
related with the fact that most policy makers as well as
researchers treat entrepreneurs as a homogeneous
group of actors that are uniformly affected by economic
conditions or policy interventions. This view misses very
fundamental differences among the types of entrepreneurs (particularly smallholders) who choose to
be engaged-in varieties of activities (businesses), which
affect the economy in various ways.

Virtually all of the literatures on factors facilitating
entrepreneurship development noted that financial
constraints are one of the biggest concerns impacting
potential entrepreneurs around the world (Khalid, 2003;
Beck et al., 2009; Popescu and Crenicean, 2012). Studies
have shown that the relevance of credit to entrepreneurial
activity choice depends on the individual level differences
than macroeconomic conditions or access to finance, that is,
the attitudes, skills and actions of smallholder producers
(Sanyang and Huang, 2010; Popescu and Crenicean, 2012).
Impact studies of microfinance institutions on development
have concentrated on assessing the effects of credit
programs on borrowers' as individuals, and as members of
their household and enterprises wellbeing, largely
overlooking the effects of financial access on choice of
entrepreneurial activities.

Though, there is solid empirical evidence that improved
access to credit spurs enterprise growth; little is known
about what type of enterprises are preferred by
smallholders and what factors influence entrepreneurial
activity choices of borrowers.

Reviews of literatures on microfinance and economic
growth display several dimensions of financial constraints
but few were concerned with the association of access to
finance and entrepreneurial activity choice. Moreover,
there is hardly any work on the relationship between
entrepreneurial activity choice and loan utilization among
smallholders. Therefore, this paper characterizes the
entrepreneurial behavior of smallholders based on their
access to microfinance among the clients of Eshet, Harbu
and OCESCO (Oromia Credit and Saving Share Company)
in South western Ethiopia.

\textbf{RESEARCH METHODOLOGY}

\textbf{Description of the study areas}

The study was conducted in Jimma zone, which is one of the 13
administrative zones in Oromia Regional State. Jimma zone is one
of the major coffee growing zones in the country; currently the total
area of land covered by coffee in the zone is about 105,140 ha,
which includes small-scale farmers' holdings as well as state and
private owned plantations. The Zone accounts for a total of 21% of
the export share of the country and 45% of the export share of the
Oromia Region (Anwar, 2010). The survey considered smallho
lders' households that are the clients of Eshet, Harbu, OCESCO (Oromia
Credit and Saving Share Company) microfinance institutions in
Seka, Yebu and Agaro districts.

\textbf{Data and data sources}

A community based cross-sectional study design was employed
based on the framework of household production model. The data
for the study were collected from secondary and primary sources.
The secondary data were collected from documentations of the
financial institutions surveyed, and District and Zone Finance and
Economic development office. In the survey both formal and
informal methods were employed to collect the required information
from clients of the microfinance, and key informants. Self
administered semi structured questionnaire and individual
interviews using the pre-tested questionnaire were made to
generate the household level data.

\textbf{Sample size and method of sampling}

A multi-stage mixed sampling procedure was adapted for selecting
the sample of borrower, in which a two stage purposive sampling
(to select the districts and the FA’s) followed by random sampling
techniques (to select the households) was used. The sample
districts were selected based on secondary information with the
help of knowledgeable people about the area and information from
the microfinance institutions. Three major FAs from each district
were then identified based on distribution of the microfinance
institutions, and accessibility. From total of these nine FAs,

\textsuperscript{1} the dominant social/economic group in Ethiopia

\textsuperscript{2} Farmers’ Association
proportional to the population (clients of the microfinance institutions), 140 households were selected for the study.

Methods of data analysis

Descriptive analysis and econometric analysis were used for analyzing the data.

Descriptive statistics analysis

Descriptive and inferential statistics were applied in documentation of the basic characteristics of the sampled clients along with the portrayal of entrepreneurial activity in the area. This employed use of descriptive statistics. The study also tested variables individually whether they had an effect on entrepreneurial utilization of credit using the Chi-square, F- test and t-tests.

Econometric analysis

In household production, model households are basic economic units making a number of decisions in their day to day life. To analyze factors that determine household’s choice of entrepreneurial activity, the multinomial logit model was used. Multinomial logistic regression is used to analyze relationships between a non-metric dependent variable and metric or dichotomous independent variables. Based on Liao (1994), when a single dependent variable takes on three or more discrete and/or when their natural ordering is not clear then the responses are usually called multinomial responses.

The multinomial version of these models has logit and probit specifications. But the multinomial logit model is preferred, not only because of its computational ease but also it is based on basic economic theory of utility maximization (Liao, 1994). The model is derived from random utility function (McFadden, 1973). In random utility model it is assumed that individuals maximize their utility by choosing one of the alternatives available to them. In this case, it is assumed that the borrower maximizes his/her utility by choosing one among the available mutual exclusive alternative to invest their return from microfinance institutions.

Specification of multinomial logit model

The specification of multinomial logit probability model is given below: First, let j denotes a given discrete business alternative for the borrower, which takes the value from 0 to 2 whereby; j = 0) represent household’s choice to support 3 their job before the loan; j = 1 represents households who diversified their businesses; j = 2 represents household who begin new business. Then, choosing the j = 0 as standard regime and assuming that the sum total of probabilities of all the three entrepreneurial alternatives must be unity. Using the unordered random utility model specification used in Wooldridge (2002), the model for the ith respondent faced with j choice presented as follows: Suppose that the utility of choice j is:

\[ U_i = X_i + \epsilon_i \]  

In general, for an outcome variable with J categories let the jth business strategy that the ith household chooses to maximize its utility could take the value 1 if the ith household chooses jth entrepreneurial alternative and 0, otherwise. The probability that a household with characteristics X chooses business option (entrepreneurial alternative) j, \( P_i \) is modeled as:

\[
P_i = \frac{\exp(\beta_j X_i)}{\sum_{j=0}^{J} \exp(\beta_j X_i)}, \quad j = 1, 2, 3 \quad i = 1, 2, \ldots
\]

Where: \( P_i \) = probability representing the jth respondent’s chance of choosing entrepreneurial option j, \( X_i \) = Predictors of response probabilities, \( \beta_j \) = Covariate effects specific to jth response category with the first category as the reference. \( \beta_1, \ldots, \beta_J \) are m vectors of unknown regression parameters (each of which is different, even though \( X_i \) is constant across alternatives). By setting the last set of coefficients to null (that is, \( \beta_J = 0 \)), the coefficients \( \beta_j \) represent the effects of the X variables on the probability of choosing the jth alternative over the reference category. In fitting such a model, J −1 sets of regression coefficients are estimated.

RESULTS AND DISCUSSION

Demographic and socio-economic characteristics

Age and gender of the respondents

Tables 1 to 5 present the summary statistics of several key household variables. The results of the household survey show that the mean age of the respondents was 39 years with average 9 years of working experience in the main occupational activities. The mean age for male respondents was 39 (n = 97) and female’s was 41 (n = 43). With regard to nature of the business (whether respondents have changed their main occupational activity because of the credit) and its relation to age, respondents were grouped into two categories, where households opted to expand their main occupation (59%) are found to be greater than those undertook new activity (41%). As displayed in Table 1, the mean age 42 years for the former category is significantly greater than the later (35 years), which may imply that older people are either reluctant to take on new businesses.

As shown in Table 2, from a total of 140 respondents, 69% were male and 31% were female. Majority of male respondents (76%) have changed their main occupation as a result of the loan, while 59% of female were found to change their occupation, though no significant association was observed between gender and change of entrepreneurial activity. Female’s lower propensity to change business (as compared to the male counterpart) is more likely due to their lack of access to information, or lack of appropriate incentives to act on the information as well as restricted decision power on some basic resources.

Educational status of respondents

Entrepreneurship is a high risk investment, and as such only non-risk-averse individuals are likely to begin new
Table 1. Demographic and economic characteristics of the households by nature of business.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Nature of the business</th>
<th>Average</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New venture mean (SD)</td>
<td>Expansion mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Age</td>
<td>35(9)</td>
<td>42(10)</td>
<td>38(11)</td>
</tr>
<tr>
<td>Family size (Adult equivalent)</td>
<td>3.4(2.1)</td>
<td>4.2(2.3)</td>
<td>3.8(2.2)</td>
</tr>
<tr>
<td>Formal education level/grade</td>
<td>7.28(3.4)</td>
<td>7(3.8)</td>
<td>7(3.6)</td>
</tr>
<tr>
<td>Land size (Hectares)</td>
<td>1.3(1.4)</td>
<td>1.6(1.8)</td>
<td>1.5(1.6)</td>
</tr>
</tbody>
</table>

***, ** statistically significant at 1%, 5% significance levels, SD = standard deviation.

Table 2. Gender and pre-loan economic activity of respondents by the nature of business.

<table>
<thead>
<tr>
<th>Description</th>
<th>Nature of the business</th>
<th>Chi-square value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crop dominated livestock (I)</td>
<td>9</td>
<td>26</td>
</tr>
<tr>
<td>Pity trade dominated livestock (II)</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Pity trade dominated crop (III)</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Crop dominated pity trade (IV)</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Male</td>
<td>30</td>
<td>39</td>
</tr>
</tbody>
</table>

***, statistically significant at 1% significance levels.

Table 3. Respondent’s characteristics and post loan entrepreneurial activity.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Agriculture mean (SD)</th>
<th>Pity trade mean (SD)</th>
<th>Off-farm mean (SD)</th>
<th>Mean (SD)</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>43(10)</td>
<td>37(10.2)</td>
<td>35.6(9)</td>
<td>38(11)</td>
<td>7.3***</td>
</tr>
<tr>
<td>Family size (Adult equivalent)</td>
<td>4.5(2.5)</td>
<td>3.5(1.9)</td>
<td>3.4(1.2)</td>
<td>3.8(2.2)</td>
<td>3.6</td>
</tr>
<tr>
<td>Formal education level/grade</td>
<td>7.4(3.9)</td>
<td>7.5(3.8)</td>
<td>6.2(3.5)</td>
<td>7(3.6)</td>
<td>1.5</td>
</tr>
<tr>
<td>Land size (Hectares)</td>
<td>2.3(2.3)</td>
<td>0.85(0.45)</td>
<td>0.88(0.46)</td>
<td>1.5(1.6)</td>
<td>8.1</td>
</tr>
</tbody>
</table>

***, **, statistically significant at 1%, 5% significance levels respectively, Adult equivalent = AE, Hectares = ha.

Table 4. Relationship between nature of the business and the major problems faced.

<table>
<thead>
<tr>
<th>Major problems</th>
<th>Nature of the business</th>
<th>Total %</th>
<th>Chi-square value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New venture N (N %)</td>
<td>Expansion N (N %)</td>
<td></td>
</tr>
<tr>
<td>Inadequate training/inception</td>
<td>11(8)</td>
<td>26(19)</td>
<td>27</td>
</tr>
<tr>
<td>Poor follow up/support</td>
<td>6(4)</td>
<td>22(16)***a</td>
<td>20</td>
</tr>
<tr>
<td>Limited marketing support</td>
<td>30(21)***b</td>
<td>21(15)</td>
<td>36</td>
</tr>
<tr>
<td>Liquidity constraint</td>
<td>11(8)</td>
<td>13(9)</td>
<td>17</td>
</tr>
</tbody>
</table>

*, **, *** statistically significant at 1%, 5%, 10% significance levels.

venture (Miner and Raju, 2004). Education influences the selection to become an entrepreneur through various mechanisms. Primarily, human capital influences occupational choice and performance patterns within occupations. Mean educational attainment of household heads was 7 years of schooling, and 77% of respondents were found literate (Table 1). The survey found that women without formal education out-number men in the
same category. However, women’s average formal education (7.41 years) is greater than that of male (6.21 years). This possibly is because of the fact that micro finances target on improvement of disadvantaged social classes; however males with higher education level mostly have further prospects elsewhere. In the independent sample t-test analysis, the average year of formal schooling for the ones changed their main occupation (7.3 years) was greater than (6.9 years) the respondents did not change their occupation.

Farm size and land tenurial status

The farm size was expressed in terms of amount of land actually cultivated in any farming season. the result showed that 16% (n = 23) respondents did not have title to land, among the respondents having land use right (83%) worked on pieces of land less than two hectares, only twelve (one percent) worked on more than two hectares of land. As illustrated in Table 1, the average farm size in the sampled households is 1.7 ha.

The evidence on the relationship between land size and change of business activity because of the loan demonstrates (Table 1), the respondents that changed their main occupation have less average land holding (1.3 ha) than the respondents opt to expand their existing business (1.6 ha). However, no or weak statistically significant correlation has been observed between land holding and the nature of the entrepreneurial activity undertaken.

Main occupational activities

The result of the survey on main occupational activities prior to the loan recognized four main activities. These are crop dominated livestock production, petty trade dominated crop production, petty trade dominated livestock production and crop production dominated petty trade. However, the activities are not mutually exclusive, for some of respondents simultaneously engaged in two or more occupations in varying degrees. As shown on Table 2, out of 140 household heads, 41% reported crop dominated livestock as their main occupational activity and 26% exercised petty trade dominated livestock, 24% engaged in petty trade-dominated crop farming and while 9% crop farming-dominated petty trade as their main source of income. As evident from Table 2, due to the loan, 40% of crop dominated livestock, 53% of petty trade dominated livestock production, 36% of petty trade dominated crop farming, and 31% of the crop dominated petty trade have changed their main businesses. The analysis of response on change of business entails that only less than a third of the respondents preferred to be engaged on agricultural production, while the remainders resorted to petty trade with varying degree of intensity. The out flock of entrepreneurs from agriculture to petty trade has a remarkable implication on the country’s endeavor to food security and curbing food price hikes even though it widens the economic pillars. The activity shift from agriculture to non agriculture sector increases the general consumers while decreasing the number of food producers at least in the short run which may end up hiking up food prices.

The main occupations the respondents engaged-in after the loan are displayed in Table 2, where a significant association has been observed on age, family size and landholding of the respondents with the entrepreneurial activity engaged-in because of the loan. As it is noticeable in Table 3, household heads in the agriculture businesses (average of 43 years) are significantly older than that of petty trade (37 years) and off-farm activities (35 years) implying the scarcity of productive labor and product in agriculture sector. Similar to age of the respondents, the family size (4.5 AE) and agricultural land size (2.3 ha) in agricultural activity of the respondents was significantly higher than the ones in petty trade with 3.5 AE and 0.85 ha, and that of off-farm activity was 3.4 AE and 0.88 ha, respectively.

The main product the micro finances offer in the survey areas is a group-liability loan, followed by saving. Groups are formed by average of 6 to 10 members who agree to mutually guarantee the reimbursement of their loans. The loan size increases by 50% as the client progresses from one loan cycle to the next. The loan amount ranges from

Table 5. Relationship between nature of the business and Loan cycle.

<table>
<thead>
<tr>
<th>Loan cycle</th>
<th>Nature of the business</th>
<th>Total N%</th>
<th>Chi-square value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New venture (N%)</td>
<td>Expansion (N%)</td>
<td></td>
</tr>
<tr>
<td>1st</td>
<td>17</td>
<td>14</td>
<td>31</td>
</tr>
<tr>
<td>2nd</td>
<td>4</td>
<td>14***a</td>
<td>18</td>
</tr>
<tr>
<td>3rd</td>
<td>6</td>
<td>20***a</td>
<td>26</td>
</tr>
<tr>
<td>4th</td>
<td>15***b</td>
<td>10</td>
<td>25</td>
</tr>
</tbody>
</table>

***a statistically significant at 1%, significance level, ***b those who have embarked on new business in their 1st and last season are significantly higher than the ones did not.

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The main product the micro finances offer in the survey areas is a group-liability loan, followed by saving. Groups are formed by average of 6 to 10 members who agree to mutually guarantee the reimbursement of their loans. The loan size increases by 50% as the client progresses from one loan cycle to the next. The loan amount ranges from
1,000 Br to 5,000 Br per member depending on loan purpose and length of client ship. The entrepreneurs take on the following three major activities after the loan:

i. Petty trade (local food and drinks processors, cart transport, small hotels and tearooms and other retail activities) accounted 44%;

ii. Off-farm loan (handicraft, cattle fattening, cereal vending) 32%;

iii. Agricultural (purchase oxen, dairy) 24%.

As displayed in Table 4, respondents’ rank the major problems encountered in the business decision process, where limited marketing support (36%) was the dominant problem followed by inadequate training during inception of the business (27%). There was a significant association between the problem faced and the entrepreneurial activity adapted. The number of respondents that reported limited ‘market support’ as a dominant problem are significantly larger under new business option than the ones expanded their older job, whereas respondents who ranked ‘poor follow up’ as a major problem are significantly greater in the group expanded their older business than the ones embarked on new ventures. This implies that majority of the problems faced by the entrepreneurs are not directly related to finance, but rather arise as a result of weak institutional support and linkages. This may mean for financial institutions to integrate their training and monitoring with extension and marketing services of concerned stakeholders.

Significant association was observed between lengths of participation in the lending program (loan cycles) and the nature of entrepreneurial activity tailored. Table 5 reveals that new clients have changed their business more proportionally than the relatively established clients. The evidence from Table 5 shows that majority of respondents (17%) that get on new ventures managed to change their activity on the first loan cycle. Possibly it is related with lack of entrepreneurial skill (poor training during inception and follow up). Focus group participants indicated that most of the clients are doubtful whether their business would be able to pay the debt, mainly in the first season. However, according to key informant’s discussion, based on the performance form the first season, in the second and third years of their client ship, borrowers look for entrepreneurial solutions for their businesses.

**Determinants of clients’ choice of entrepreneurial activities**

Prior to conducting the analysis multicollinearity among the explanatory variables was checked so that the parameter estimates will not be seriously affected by the existence of multicollinearity among variables. The variables were tested for heteroskedasticity and the test rejected for all variables, the null that there is a significant difference among the variables in the same group variances. Besides, practicality of the multinomial logit model depends on the independence of the alternatives (Liao, 1994).

In order to check the independence of the alternatives Haussmann’s specification test of independence was undertaken. The test did not reject the null hypothesis of independence of the included business options suggesting there is no evidence against the specification. Also, because of the Haussmann’s endogeneity test ‘income of the household head’ is left out of the model for it is endogenous with occupational choice. Finally, as shown in Table 6, the estimated model fitted the data reasonably well; the likelihood ratio tests indicated that the slope coefficients were significantly different from zero at less than 1% significance level.

**DISCUSSION OF RESULTS**

**Age**

The age of the household head measured in years is a continuous variable implying experience in his/her main activity. It was found to be significantly and positively related to diversification option but negatively related to business expansion option. This positive sign entails that, keeping all other variables constant, the likelihood of diversifying the business at hand increases as the age of household head increases, as compared to expanding/sustaining the business. Whereas the negative sign in the expansion column imply that an increase in age is negatively related with the probability of expanding businesses as compared to staying in the same business (Table 6).

This is principally, at older ages the physical ability of the household head decreases to manage the available business let alone to expand it; however households diversify their enterprises to sustain that level of income which may support livelihood of the family. Furthermore, in relation to an increase in age, social responsibility shares the time otherwise would have been used for the main occupation. Additionally, individuals who have stayed for long in a business may establish a goodwill or social capital (regular client) in the business which they are less willing to change because of loss of their regular clients and fear of institutional arrangement in the new business.

An increase in the age of the household head by a year increases the odds of choosing the diversification option increases by 16% and the likelihood of expanding the business at hand decreases by 1.2%. Corresponding to this, Sinha (1992) also elucidated that older people are risk averse and choose to widen their means of guaranty. This result is also consistent with standard job-shopping
Table 6. Multinomial logit estimates of determinants of clients’ entrepreneurial options (Marginal effects).

<table>
<thead>
<tr>
<th>Explanatory variables</th>
<th>Expansion (Z value)</th>
<th>Diversify (Z value)</th>
<th>NewBizz (Z value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE (age number of years)</td>
<td>-0.010(-1.19)</td>
<td>0.016(2.03)**</td>
<td>-0.005(-0.51)*</td>
</tr>
<tr>
<td>EDULEV (education in years of formal schooling)</td>
<td>-0.048(1.24)</td>
<td>0.01(2.19)**</td>
<td>-0.05(1.2)*</td>
</tr>
<tr>
<td>FAMSZ (family size in Adult equivalence)</td>
<td>0.121(0.78)***</td>
<td>0.000(2.76)***</td>
<td>-0.121(-2.69)</td>
</tr>
<tr>
<td>TLU (livestock In TLU)</td>
<td>-0.001(-0.27)</td>
<td>-0.002(-0.41)</td>
<td>0.003(0.64)</td>
</tr>
<tr>
<td>Land (farmland in hectare)</td>
<td>-0.000(-0.91)</td>
<td>0.000(2.8)</td>
<td>-0.000(-1.19)</td>
</tr>
<tr>
<td>CRIS (expected risk in probability)</td>
<td>-0.049(-1.34)</td>
<td>0.03(0.79)</td>
<td>0.019(-0.80)</td>
</tr>
<tr>
<td>Social expenditures in Birr</td>
<td>0.094(-1.69)</td>
<td>-0.149(-2.95)**</td>
<td>0.055(0.52)</td>
</tr>
<tr>
<td>Marketing information (Yes/no)</td>
<td>-0.105(-2.54)</td>
<td>0.100(2.34)**</td>
<td>0.005(0.67)</td>
</tr>
<tr>
<td>Market price (in Birr)</td>
<td>0.012(0.78)</td>
<td>-0.000(-2.12)</td>
<td>-0.011(-2.21)</td>
</tr>
<tr>
<td>Multiple sourcing (Yes/no)</td>
<td>0.09(0.90)</td>
<td>-0.171(-2.01)</td>
<td>0.08(0.80)**</td>
</tr>
</tbody>
</table>

***, **, *significant at 1%, 5%, 10% respectively, ∂y/∂x = marginal effects. Number of observations = 140, Wald χ² (24) = 60.05, Prob χ² > χ² = 0.0001, Log pseudo likelihood = -119.790, Pseudo R² = 0.1971.

models such as Johnson (1978) and Miller (1984) which predict that younger workers will try riskier occupations first, and their argument that the probability of switching into new ventures is roughly independent of age and total market experience.

Education

Formal years of schooling of household head (a discrete variable) was found to be negatively and significantly correlated with the new venture option, and positively with the diversification option. The negative sign points out that as education level of the household head increases the possibility that the household chooses to engage in new business contracts as compared to expanding the old business. This is possibly because as level of education increases, households analyze the risks associated and interpret the available information in a more productive way than lower education level.

Hence, smallholder households with a better knowledge did seem to engage in new businesses (lose their guaranty unless the information they get persuades them to do) opportunity cost of adapting the strategy is lower). More importantly, poor households are known to distribute risks over portfolios of asset (Siegel and Alwang, 1999). Thus, as the level of education increases by a year of schooling, the probability that the household will choose to engage in new business falls by 5% while, the probability to diversify the business increases by 1% as compared to the reference category. Similarly, Van der Sluis and Van Praag (2008) studied the relationship between education on entry into and performance in entrepreneurship in developing countries; the relationship between schooling and performance is unambiguously positive.

More education increases the outside opportunities and drive potentially successful entrepreneurs to other occupations where the marginal value of additional education is higher than for entrepreneurship. This result is consistent with the view that men with better education level are more likely to switch into new ventures if they have better assets. However, micro finances are meant to serve the disadvantaged social groups that lack basic resources. Therefore, besides the education level, the wealth status of the household determines entrepreneurial activity choice.

Family size

Family size measured by adult equivalence was found to have a positive and significant relation with the new business and diversification options. The positive relationship between economically active labor force and choosing the new business position entails that keeping all other variables constant, the probability of being engaged in new ventures increases as the economically active family size increases.

The marginal effect of an increase in amount of labor by one adult equivalent increases the likelihood of opting for new venture by 7.2%. It is possibly because changes in family composition and in the roles as well as relations of family members have implications for the emergence of new business opportunities (entrepreneurial skill), opportunity recognition, business start-up decisions, and the resource mobilization process (Aldrich and Jennifer, 2003).

In other way, in view of the fact that the household head need to support all the members, he/she looks for opportunities to diversify and secure livelihood. Therefore, an increase in family size by an adult equivalence increases the probability to diversify by infinitesimally smaller percentage. The percentage is so
smaller because the unit of measurement, adult equivalence, gives higher weight to the more economically active labour (and so less for the non productive family member).

**Land size**

The variable measures the size of productive land holding in hectares. It represents household’s physical asset holding and influences the nature of the activity the household may undertake. The analysis exposed that, as the size of land holding increase, the households' likelihood to expand the available business increases. In other way, land shortage is positively associated with the likelihood of new business option. Families without land usually rely on their livelihood income from working as hired labor or non-farm activities. This enhances the opportunity to come across and learn the nature of different businesses, which may boost the likelihood of engaging on new ventures whenever limitations are alleviated. The marginal effect of an increase in a hectare of land increases the probability of expanding the existing business by less than one percent. As Vollrath (2007) discussed, land inequality can be an important factor influencing the propensity to become an entrepreneur through different channels mainly for land can be used as collateral for bank loans, especially in cases of loans needed to start a new firm or to enlarge an existing one.

**Multiple sourcing**

It is a dummy variable having value of 1, if the household has multiple sources of credit and 0 otherwise. The variable, whether the household has borrowed from multiple sources or not, correlates positively and significantly with new business option if the household had more than one source. The positive relationship shows that, other variables fixed the odds in favour of choosing to set up new business increases, if the borrower had multiple sources as compared to expanding the existing business. Roughly, it means that if the household has single source of credit, the possibility of expanding his business increases. This may seems to correspond with Crépon et al. (2011), argument that money is fungible and credit is only loosely monitored, and one might have expected that the loans would help those who desired to start something new. However, particularly in this case, it is the inadequacy of amount of loan sighted as the reason for the positive relation between multiple sourcing and the new business option. As the household has multiple sources in reference to single source, the probability that the household would opt to start a new business increases by 8% as compared to the expansion option.

Besides, in rural areas, micro finances are encouraged to finance existing activities, which had a track of records. This was to make sure that repayment rates would be high. The close attention paid to repayment rates, which may lead to certain conservatism by credit officers, and may reduce the extent to which microcredit indeed leads to starting new, profitable activities (Beck et al., 2009; Field et al., 2011).

**Collect and utilize market information**

The variable was used as a dummy variable taking value 1 for collecting and using market information and 0, otherwise. Having access to market information is positively and significantly related to diversifying options. Household heads that collect and make use of market information are encouraged to diversify their business as compared to expanding the existing business. The positive relationship indicates that keeping all other variables constant, the likelihood of choosing to diversify the existing business increases as the household collect and utilize market information than not by 10%, as in reference to the expansion option.

Recent research indicated that frequent interaction with customers (the use of formal procedures for collecting and utilizing market information) has a positive impact on new product performance, which in turn should impact new venture performance (Parry and Song, 2010). It implies that having access to market information enlightens the household about the market prices, and demand, if they found the market to be disgusting, they refrain from diversifying the business.

**Expenditure on social purposes**

This variable is a continuous variable measured in terms of amount of money expend on social rationale. The variable is used in the model to include expenditures like marriage and circumcision expenditures, funeral and other religious or traditional ceremonies. The model result shows these expenditures correlate positively and significantly with continuing on the established business option. The positive signs entail that the increase in the likelihood of continuing in the established business increases as households engaged more on social commitments (Table 6). On the other hand, the variable was found to have negative and significant relation with the new business option, indicating that expenditures on social issues curtail the possible amount of money that would otherwise be used for new venture establishment.

Participation in social commitments increase the social capital of the household head may be to the extent that it serves as a trade mark for his business. Therefore, it was evident that the increase in the amount of social purposes increases the likelihood of staying on the same business, increases by 93%. Pertaining to the new
business option, since the social purpose and its return decreases the amount of time, money and marketable surplus, the likelihood of choosing new business option decreases by 15% in contrast to the reference category.

CONCLUSION AND RECOMMENDATION

The results indicate the presence of a fundamental set of reasons for business start-up, expansion and or diversification in addition to a mere access to finance. It appears that, like the economic theories, rather than the access to credit, the amount of loan is important in determining entrepreneurial activity decision. Variables employed have been found to have different effects on the choice of entrepreneurial activity options both in the trend and magnitude. However it has been difficult to single out the effects of other source of income besides loan (remittances, windfall gains etc.). This study also found that access to credit increased a move to non-farm activities and this have an ambiguous consequence in the long run development of agriculture and hence food security. Microfinance institutions give trainings and monitor the activities of their clients; however, there is lack of distinction of problems faced by different entrepreneurs, some being beginners fail in marketing their products, others lack basic skill of operation. The significant relationship between problems faced and entrepreneurial activity choice supports this conclusion. In addition to the external factors like credit, entrepreneur’s own characteristics and interaction of the factors affect the choice of the entrepreneurial activity.

Therefore, if micro finance is to boost entrepreneurship, it should be on the enterprises having long last impact on the country’s development and social welfare. Further, micro finance programs should be aligned with the country’s strategic plan in such a way that it can expand and strengthen sectors that have higher multiplier effect. Also, it is advisable for microfinance institution’s endeavor to enhance the quality of their advisory services by focusing on specific problems the entrepreneur faced rather than giving general training perceiving entrepreneurs as homogenous.

Financial institutions and entrepreneurship development organizations need to establish specialized units to provide the framework and strategy necessary in designing and delivering effective credit policies as well as programs for attracting and enlightening members of the small business sector. Finally, the results of this paper have important implications for microfinance institutions and other stakeholders making general efforts to support entrepreneurial activities of smallholders. Future studies should investigate the relationship between enterprise choice and credit service, employing larger sample sizes, wider variables, encompassing wider and different geographical, cultural and economic aspects.

REFERENCES


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