

*Full Length Research Paper*

# The effect of cooperative thrift and credit societies on personal agency belief: A study of entrepreneurs in Osun State, Nigeria

Bamidele Adekunle and Spencer J. Henson

<sup>1</sup>Research Associate Ontario Agricultural College, University of Guelph, ON, N1G 2W1, Canada. <sup>2</sup>Department of Food, Agricultural and Resource Economics, University of Guelph, ON, N1G 2W1, Canada. 5198244120 ext 53134.

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**This paper analyzed the entrepreneurial level of microentrepreneurs in Nigeria using the basis of whether those who belong to groups where there is interdependence like the Cooperative Thrift and Credit Societies have better personal agency belief than those who are not members. The results show that entrepreneurial alertness is predicated upon being a member of Cooperative Thrift and Credit society. The same result also prevails, after taking into consideration pre-existing conditions like age, education and gender.**

**Key words:** Personal agency belief, perceived self efficacy, locus of control, cooperative thrift and credit society; entrepreneurship.

## INTRODUCTION

Entrepreneurship is important in economic development but little significant has been given to the effect of interdependent communities on entrepreneurial development. The concept of entrepreneurship in this study is defined as personal agency belief which is determined by the individual's perception about their ability to take action which leads to desired outcome and capability. This study evaluates the role of Cooperative Thrift and Credit Societies in entrepreneurial development. Cooperative Thrift and Credit Societies are member-based organizations that help members to address economic problems. They are not banking institutions because of their goal. The ultimate goal is to encourage thrift among the members and to meet credit needs of people who might otherwise fall prey to loan sharks and other predatory lenders (The Ledger, 2004). Cooperative societies are widely spread organization in developing countries, they are known for strong commit-

ment of, as well as participation in the decision making of their members (Haan et al., 2003).

These societies mobilize local savings and administer credit to members, thereby encouraging thrift and entrepreneurial activity. When first started, credit unions use relatively unsophisticated administrative practices, so that the costs are very small and most interest income from loans may either be distributed to the members or reinvested in the credit union within a capitalization programme. Consequently, they can be set up in poor communities, where access to means of secure savings and to credit at non-exploitative terms is of greatest importance (UNDESA, 1999).

Osun State of Nigeria was the study area. Questionnaires were administered to three groups of microentrepreneurs: Cooperative Thrift and Credit Societies members, non-members who obtain finance from other sources and those who do not have access to external finance. This study allowed us to assess whether the entrepreneurial ability, accessibility to credit and business success of people in interdependent societies were significantly different from non-members. The results indicated that members of Cooperative Thrift and Credit Societies had better entrepreneurial ability.

\*Corresponding author. E-mail: [badekunl@uoguelph.ca](mailto:badekunl@uoguelph.ca).  
Phone: 5193419632

## Economics of entrepreneurship

Researchers, social scientists and scholars have diverse opinions about who is an entrepreneur. Cantillon (1755) introduced the concept of the entrepreneur. He ascribed entrepreneurial ability to landowners, arbitragers and wageworkers. Say (1803) improved on this premise by describing an entrepreneur as the coordinator of production and distribution, to him an entrepreneur is a leader and a manager. Neoclassical economists like Marshall (1890) also emphasize the importance of the entrepreneur. He argues that the entrepreneur is the supplier of commodities, though the formalized model of neoclassical economics did not. Knight (1921) defines entrepreneurship as uncertainty bearing. Schumpeter (1934) sees entrepreneurship as a destructive process that destroys the existing state of equilibrium and according to Coase (1937) decisions within the firm are made through entrepreneurial coordination.

Baumol (1968) argues that an entrepreneur is an individual who locates new ideas and puts them into effect. He leads, perhaps even inspires, and today's practice is never good enough for tomorrow. This is close to the 'Schumpeterian innovator'. Leibenstein (1968) defines an entrepreneur as an individual or group of individuals with four major characteristics: i) he connects different markets, ii) he is capable of making up for market deficiencies (gap-filling), iii) he is an input completer and iv) he creates or expands time-binding, input transforming entities. The suggestion that business history has not yet created a satisfactory general hypothesis on the role of entrepreneurship belongs to Soltow (1968). Meanwhile, Leibenstein (1968) contends that the received theory of competition gives the impression that there is no need for entrepreneurship. He submits that the development economist should look at impediments that obstruct the gap-filling and input-completing capacity of the entrepreneur. Baumol (1968), also, made a striking observation that in a growth conscious world the encouragement of the entrepreneur is the key to the stimulation of growth. Humberto (1989) suggests that entrepreneur is shorthand for uncertainty, imperfect information and the unknown. Entrepreneurship operates in disequilibrium and is not compatible with modern economic theory. The importance of entrepreneurs in economic development was also emphasized by Nafziger (1977) and Van Praag (2005).

Kirzner (1997), in a simpler approach (assetless perspective) defines an entrepreneur as an individual who is alert to opportunities in the environment (Venkataraman, 1997; Sarasvathy et al., 2003) and is also ready to learn from past mistakes. The key interrelated concepts in which entrepreneurship is understood according to Kirzner are the entrepreneurial role, the role of discovery and rivalrous competition within the market. The entrepreneurial role (Mises, 1949) is human action in response to uncertainty. Mises (1949)

depicts entrepreneurship as human action seen from the aspect of the uncertainty inherent in every action. In like manner, boldness and imagination are the traits of the entrepreneur. It is widely known according to Mises that, the daring and alert entrepreneur discovers earlier errors, buys where or when prices are low and sells where or when they are high. In this present age of continuous market dynamics and change in taste, the availability of resources to accomplishing entrepreneurial process guarantees profit-incentives, which tend to nudge the market towards equilibrating directions

The role of discovery is the ability of an imaginative, responsive and the alert entrepreneur to correct flawed plans. Decisions can be corrected as a result of a decision-maker's breakthrough and discovery of an earlier error. It is worthy of note at this juncture that, a tough competitive market environment would lead a futurist entrepreneur to discovering methods to remain viable in the market environment. Entrepreneurs compete with one another in the market place. This process is encountered in everyday business life in which entrepreneurs try to do better than one another and this is what is referred to as rivalrous competition.

Busenitz and Barney (1997) state that those who are more susceptible to the use of biases and heuristics in decision-making are the ones who are close to becoming entrepreneurs. To them, people who think in certain ways tend to be attracted to entrepreneurship. All these definitions are very relevant in the understanding of market discovery. Chen et al. (1998), simply state that an entrepreneur is an individual who has very good self-efficacy. They state that good competence (self-efficacy) is measured by how well an individual can market the firm's product, manage the business, innovate new ideas, risk taking ability and adequate financial analysis. Harper (2003) defines entrepreneurship as a function of personal agency belief (this is reasonable because individual traits affect entrepreneurial behavior). Personal agency belief depends on the individual's locus of control (LOC) and self-efficacy (SE). Locus of control is the respondents' perceived ability to influence events in his or her own life. Internal persons believe that fate and fortune is within their own personal control. In contrast, external persons believe that their lives are controlled by external forces such as destiny, luck, or powerful others (Begley and Boyd, 1987). Self-efficacy is the belief in one's capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands (Wood and Bandura, 1989). Self-efficacy can also be defined as the belief that one's actions lead to the desired outcome.

Phan (2004) indicates that contracting theories, evolutionary theory and the resource-based theory of the firm are deficient in explaining the way the firm behaves. He submits that opportunity recognition, as an emergence phenomenon, will only be relevant if it is sensitive to higher contexts like culture, institutional

arrangements and political-economic exigencies. Minniti (2004) also goes further to state that entrepreneurship is encouraged when information is not evenly distributed. Klein (2002) refers to this type of situation as asymmetric interpretation, though some people call it asymmetric information. Entrepreneurship is a path-dependent phenomenon (Minniti, 2002; Harper, 2003) therefore certain political and institutional settings are conducive for entrepreneurship. Thus, entrepreneurial activities are socially conditioned; there is exchange of information when entrepreneurs interact with one another within a group to deal with uncertainty (Kalantaridis, 2004).

It is worthy of note that entrepreneurship is shaped by culture. There are two major hypotheses on the relationship of the individualism and economic development. There is the cornerstone hypothesis (Weber, 1930; Shane 1993; Tiessen, 1997 as cited in Harper, 2003), which states that individualism is a more conducive and a necessary condition for economic development in a modern economy. This hypothesis came to the conclusion that individualistic cultures are more entrepreneurial than group oriented culture. The convergence (Greenfield and Strickon, 1981; Hayek, 1979; 1988 as cited in Harper, 2003) hypothesis states that as a society modernizes, cultural values of their members tend to converge towards individualism. The process of modernization dissolves group-oriented communities and culture, which again, promotes individualistic values.

Different scholars have criticized these two hypotheses. Harper (2003) contends that cultural conception of selfhood shapes alertness and affects the propensity to be alert. He used the highest level of social analysis – the 'social embeddedness' level (Williamson, 2000). This level consists of shared mental models, conceptions of personhood, values, norms and customs. Based on his analysis, Harper (2003) predicts that a subset of group-oriented cultures might generate a high degree of entrepreneurial alertness among members. People in this subset possess a constellation of agency beliefs that promote alertness to economic opportunities. Therefore, a culture of relatedness and interdependence is necessary for vigorous entrepreneurial development.

### **Conceptual framework**

Little or no attention has been paid to the role of entrepreneurship and the capacity of institutions like Cooperative Thrift and Credit societies to promote entrepreneurship. Entrepreneurship is the basis of economic development and growth. It causes continuous disequilibria in the market that creates opportunity for value creation in the market and affects firms' responsiveness to new market conditions. This paper examines the institutional context in which entrepreneurial processes are manifested. A blended-

value approach will be used in the development of a framework for this paper.

The blended value approach is interpreted to mean that all investments are understood to operate simultaneously in both economic and social realms (Emerson, 2000). There is no trade-off between the two rather a concurrent pursuit of value – both social and financial. A blended value approach is not about financial sufficiency or social impact per se, it is about value creation in the pursuit of both economic and social objectives. The role of Cooperative Thrift and Credit society as socio-economic institution on entrepreneurial alertness was analyzed in this paper.

Hulme (1997) outlines three main elements of a conceptual framework. These are the models of the impact chain, identification of units (level of assessment) and the specification of the type of impact to be assessed. Impact assessment usually measures the outcome of an agent who has experienced an intervention compared to the outcome that could have occurred without intervention. Cooperative Thrift and Credit societies' intervention is assumed to change human behaviour and practices in ways that lead to the desired outcome. However, the way the intervention will affect behavioural pattern is difficult to predict.

Entrepreneurship means different things to different people. Kirzner (1997) belief that entrepreneurship is a market process that create equilibrating tendency in the market, Schumpeter (1934) sees entrepreneurship as a destructive process that destroys the existing state of equilibrium. According to Coase (1937) decisions within the firm are made through entrepreneurial coordination. Busenitz and Barney (1997) states that those who are more susceptible to the use of biases and heuristics in decision making are the ones who are close to become entrepreneurs, to them people who think in certain ways tend to be attracted to entrepreneurship. In this study entrepreneurship is measured based on Harper's conception that states that entrepreneurship (personal agency belief) is a function of locus of control and perceived self-efficacy.

This study aims to undertake empirical tests to predict the relationships among microentrepreneur characteristics, social activities, locus of control, perceived self-efficacy and personal agency beliefs (entrepreneurship). The institutional framework in this study will be group oriented. This is because institutions affect people's cognitive processes and entrepreneurial capacity. Institutions and economic policies that inhibit economic freedom dampen people's alertness to opportunities through their negative effect on personal agency beliefs i.e. internal locus of control and perceived self-efficacy (Harper, 2003). Personal agency belief is a multiplicative function of locus of control (contingency) and perceived self-efficacy (competence) (Harper, 2003):

Personal Agency Belief = f (LOC \* SE).

**Table 1.** Recruitment criteria.

Criteria	Nature	Limits
1	Ownership	Owner
2	Number of employees	Less or equal to five
3	Sector	Food / Agricultural processing
4	Credit	Cooperative thrift and credit society members with finance in the last five years. Other type of finance in last five years. No finance in the last five years.
5	Location	Ile-Ife, Osun State, Nigeria

The effect of being a member of Cooperative Thrift and Credit societies on these concepts is the main objective of this paper. Specifically, this paper addresses the following research questions:

- Are locus of control, perceived self efficacy and membership of Cooperative Thrift and Credit societies positively related to personal agency belief (entrepreneurship)?
- Is membership of Cooperative Thrift and Credit societies a significantly predictor of locus of control, perceived self-efficacy and personal agency belief?
- Do microentrepreneurs' personal characteristics like age, education, gender have effect on their entrepreneurial ability?

## METHODS

### Study area

The chosen area for the study was West Africa and precisely, Nigeria. The South-Western part of Nigeria, Osun State became the locale for the study. Osogbo is the capital of the state and the population of the State at the time of the study was 2.2 million. The State is one of the six states in South-Western Nigeria. Ile-Ife (a town in Osun State), was selected for the study as a result of her semi-urban and easy accessibility to the relevant institutions. The distance to Lagos State is about 250 miles and about 2100 miles to Abuja the capital city of the country.

The Federal Military Government of General Ibrahim Babangida created the State of the "Living Spring" (as it is called), out of the former Oyo State on August 27, 1991. The State has an area of approximately 8, 602 square kilometres. It is bounded in the Southern part by Ogun State, in the Northern by Kwara State, in the Western by Oyo State and in the North-East by Ekiti State.

### Survey of microentrepreneurs

The microenterprises selected for this study were enterprises in the food and agricultural processing sectors. Each selected enterprise had at most five employees. For the purpose of this study microentrepreneurs were divided into three types: (i). Microentrepreneurs that are Cooperative Thrift and Credit societies members; (ii). Microentrepreneurs who are not members of

Cooperative Thrift and Credit societies, but have access to other types of finance in the previous five years; and (iii). Microentrepreneurs who have not had access to external finance in the past five years.

Before the final administration of the questionnaire, a pre-test of the questionnaire on the three groups was undertaken. A total of fifteen respondents selected judgementally and equally from each category was used for the pre-test. Judgemental sampling is a non-probability sampling technique useful where the population is homogenous. A non-probability sampling technique is frequently used in pre-testing the data collection instruments or procedures to be used in a larger research project (Raymondo, 1999). The criteria for the recruitment of microentrepreneurs for the survey proper are indicated below in Table 1.

Three Cooperative Thrift and Credit Societies were selected from the study area due to availability and financial constraint. These three societies represent other societies since based on the in-depth interview all Cooperative Thrift and Credit Societies have somewhat similar mode of operation (Adeyeye, 1978) . The sampling frame of the three Cooperative Societies was 576, out of which microentrepreneurs were selected randomly. The questionnaires were administered to 144 Cooperative Thrift and Credit Societies members (25% of the sampling population of 576). To have consistency the same number of non-cooperative members with access to finance and also entrepreneurs who have not had access to any type of credit in the previous five years were surveyed. In this study we have three strata because we have three financial characteristics, thus stratified sampling was used though it was not stratified random sampling because the sampling frame was a problem for non-members of Cooperative Thrift and Credit Societies. The cooperative members were selected based on simple random sampling within a known and defined sampling frame. The non-cooperative members with finance and microentrepreneurs with no finance support in the last five years were selected based on purposive sampling.

The simple random sampling for the cooperative members was achieved by using the most basic method. An identification card was created for all the 576 members and put in a container. The number desired (144) for the sample was then drawn from the container one at a time with replacement. Only the microentrepreneurs whose identification cards were selected were surveyed in this study. In the case of non- members, the purposive sampling was done in a systematic manner (every third microentrepreneurs in the area covered that fitted the selection criteria were used for the survey).

Entrepreneurship (Personal Agency Belief) was measured as a product of locus of control and perceived self-efficacy. This is not arbitrary because it captures the idea that a high level of perceived

**Table 2.** Locus of control scale.

My success depends on whether I am lucky enough to be in the right place at the right time
To a great extent my life is controlled by accidental happenings
When I get what I want, it is usually because I am lucky
My life is determined by my own actions
When I get what I want, it is usually because I worked hard for it
It is not wise for me to plan too far ahead, because things turn out to be a matter of bad fortune
Whether or not I am successful in life depends mostly on my ability
I feel that what happens in my life is mostly determined by people in powerful positions
I feel in control of my life
Success in business is mostly a matter of luck

Source: Adapted from Rotter (1966)<sup>1</sup>, as cited in Mueller and Thomas (2000)

internal locus of control and perceived self-efficacy is required for strong agency belief. To measure locus of control (LOC) respondents were asked to indicate the extent to which they agree or disagree with the following statement using a five-point likert scale from “1” at one extreme and “5” at the other extreme. Ten items comprised the locus of control scale (Rotter, 1966) (Table 2).

Perceived self-efficacy (SE) was measured using five entrepreneurial roles as identified by Chen. et al. (1998). These roles are marketing, innovation, management, risk taking and financial control (Table 3). The respondents were asked to indicate their degree of certainty in performing each of these roles/tasks on a five point scale ranging from 1= completely unsure to 5 = completely sure. To reduce social desirability in reporting perceived self-efficacy using the survey instrument, the enumerator emphasized the importance of honest for self -assessment, promise confidentiality and respondent has the right to withdraw from the survey at any time. Original LOC and efficacy scores were used in this study to calculate personal agency belief and in the construction of the dichotomous dependent variable for the logistic regression.

The locus of control scale was tested for reliability using the Cronbach’s test. The Cronbach’s alpha was 0.57 and 0.58 based on standardized items. The Cronbach’s alpha was still less than 0.60 when any of the items was deleted. The values ranged from 0.52 to 0.58. The Cronbach’s alpha of 0.57 for this study is better than a figure of 0.53 reported for Slovenia by Mueller and Thomas (2000), in their study of culture and entrepreneurial potential in nine countries with respect to locus of control and innovativeness. Davidson (2004) also argues that a formative index can be perfectly sound without having high inter-correlations among its items. The best way to improve the reliability of any scale is to increase the number of items (Garson, 2006) . The scale was also discovered to be unidimensional based on the results obtained from principal axis factoring (Factor 1 initial eigen value = 2.50 and it explained 24.94% out of the total variance of 64.25%).

The scale for perceived self-efficacy was also tested for reliability using Cronbach’s alpha. A value of 0.89 was obtained which is an indication that this scale is highly reliable. The scale was also unidimensional based on the results from principal axis factoring (Factor 1 initial eigen value = 6.84 and it explained 31.01% out of the total variance of 59.94%). Analysis of Covariance (ANCOVA)

<sup>1</sup> The original Internal-External Control Scale (I-E) scale developed by Rotter is a 29-item forced scale.

**Table 3.** Perceived self efficacy scale.

<b>Marketing</b>
Set and meet market share goals
Set and meet sales goals
Set and attain profit goals
Establish position in product market
Product market analysis
Expand business
<b>Innovation</b>
New venturing and new ideas
New products and services
New market and geographical territory
New methods of production, marketing and management
<b>Management</b>
Reduce risk and uncertainty
Strategic planning and develop information system
Manage time by setting goals
Establish and achieve goals and objectives
Define organisational roles, responsibilities and policies
<b>Risk-Taking</b>
Take calculated risks
Make decisions under uncertainty and risk
Take responsibility for ideas and decisions
Work under pressure and conflict
<b>Financial Control</b>
Perform financial analysis
Develop financial system and internal controls
Cost controls

Source: Chen. et al., 1998

was used to analyze the effect of membership of Cooperative Thrift and Credit society on locus of control, self-efficacy and personal agency belief (entrepreneurship). ANCOVA was used because it removes the effect of pre-existing individual differences among the entrepreneurs in the study. It also provides the statistical control of variability in situations in which experimental control could not be used. Logistic regression was also used to see whether membership of Cooperative Thrift and Credit society predicts locus of control, perceived self-efficacy and personal agency belief.

## RESULTS

### Determinant of entrepreneurship (Personal agency belief)

This study used descriptive statistics, correlation, logistic regression and analysis of covariance to estimate the determinants of entrepreneurship. As seen in Table 4 below, the personal agency belief average score for the sample was 2.20, while the locus of control and

**Table 4.** Descriptive statistics and correlation.

	Means	SD	1	2	3	4	5	6	7
Personal agency belief	2.20	0.54		0.81**	0.82**	-0.34**	-0.07	0.46**	0.40**
Perceived self efficacy	3.37	0.50			0.35**	-0.25**	-0.05	0.37**	0.34**
Locus of control	3.24	0.49				-0.28**	-0.07	0.39**	0.30**
Gender	0.76	0.43					0.11*	-0.37**	-0.24**
Age	43.44	10.43						-0.24**	0.40**
Education	9.66	5.69							0.20**
Membership	0.34	0.47							

\*\* Correlation is significant at the 0.01 level (2-tailed), \* Correlation is significant at the 0.05 level (2-tailed). Gender: Female = 1, Male = 0; Membership: Member = 1, Non-member = 0

perceived self-efficacy had a value of 3.24 and 3.37 respectively. The lower Personal agency belief may be as a result of internal locus of control being lower than perceived self-efficacy. According to Harper (2003), "individuals with a weak sense of perceived internal LOC are restricted to a relatively narrow and mediocre range of personal agency belief, irrespective of how competent they are". The descriptive statistics also indicated that 76% of the respondents were women, 34% were members of Cooperative Thrift and Credit societies, the mean age was 43.44 years and the average numbers of years spent in school by the respondent was 9.66years. The number of years spent in school suggested that most of the respondent finished Junior Secondary School.

Bivariate correlation (Table 4) above, indicated that entrepreneurial self efficacy, locus of control, education and membership of Cooperative Thrift and Credit society were positively related to personal agency belief (entrepreneurship) while gender was negatively related. Locus of control, education and membership were also positively correlated to perceived self-efficacy but gender was negatively related which means male have better perceived self-efficacy score. Membership of Cooperative Thrift and Credit society was positively related to all variables other than gender which shows members expressed better scores than non-members. Based on Harper (2003) suggestion on the tools to be used for analyzing entrepreneurship, logistic regression and analysis of covariance were used to know the effect of membership of Cooperative Thrift and Credit societies on locus of control, perceived self-efficacy and personal agency belief (entrepreneurship).

### Does membership of cooperative thrift and credit societies affect entrepreneurship?

Logistic regression was used to estimate the effect of gender, age, education and membership on personal agency belief, perceived self- efficacy and locus of control. Logistic regression is the most appropriate to use because dependent variable was either high or low. In

fact, in case of the locus of control, high indicates internal locus of control and low indicates external locus of control. Personal agency belief, perceived self-efficacy and locus of control were analyzed as dichotomous variables with "1" representing high personal agency belief, entrepreneurial self-efficacy and locus of control while "0" represents low. The value of "1" or "0" was determined for each microentrepreneur depending on whether they are above or below the 50<sup>th</sup> percentile.

In Table 5 above, it can be deduced that education and membership of Cooperative Thrift and Credit society predict locus of control. In other words, people who were members of the society have the odds of being an internal person 1.74 times as compared to entrepreneurs who were not members. Education will also increase the odds of high locus of control (internal person) by 1.11. In this result, gender and age do not predict locus of control.

Being a member of Cooperative Thrift and Credit society is a strong predictor of perceived self-efficacy. It had a greater effect on self-efficacy (Exp (B) = 2.799) than locus of control (Exp (B) = 1.744). Education also had a significant effect on perceived self -efficacy. Membership of Cooperative Thrift and Credit society, education and gender were all significant predictors of personal agency belief (determine an individual's level of entrepreneurship). From the table above, Exp (B) = 0.561 for gender indicates that the odds of high personal agency belief for a male is 0.561 times the odds of high personal agency belief for a female entrepreneur (B = - 0.58). The implication of this is that women are less likely than men to exhibit high personal agency belief. The Chi-square for the three models indicates that the test of overall model was statistically significant.

### The effect of membership on entrepreneurship (controlling for personal characteristics)

ANCOVA was used to test the effect of membership of Cooperative Thrift and Credit society on entrepreneurship after taking into consideration other factors like gender, age and education which can affect the entrepreneurial

**Table 5.** Logistic regression: effect of membership of cooperative thrift and credit society on entrepreneurship.

	Locus of control		Perceived self efficacy		Personal agency belief	
	B	Exp (B)	B	Exp (B)	B	Exp (B) <sup>2</sup>
Intercept	-1.37	0.26*	-0.88	0.41	-1.17	0.31
Gender	-0.32	0.73	-0.38	0.69	<b>-0.58</b>	<b>0.56*</b>
Age	0.01	1.01	0.003	1.00	-0.01	1.01
Education	0.10	1.11**	0.09	1.10**	<b>0.11</b>	<b>1.11**</b>
Membership	0.56	1.74*	1.03	2.80**	<b>1.02</b>	<b>2.78**</b>
-2 log likelihood	517.42		500.92		486.15	
Model chi-square	53.75**		71.35**		87.62**	
Nagelkerke R Squared	0.16		0.21		0.25	

\*\* Significant at the 0.01 level (2-tailed), \* Significant at the 0.05 level (2-tailed)

ability of an individual. ANCOVA assumes the dependent variable is continuous and measured at interval scale, based on this it is necessary to use the original locus of control (LOC) and efficacy (ESE) scores. As earlier stated, the score from the multiplication of original score of LOC and ESE generated the original score for personal agency belief (entrepreneurship) Table 6.

In this paper, the effect of financial category which an entrepreneur belongs to on entrepreneurship was assessed while controlling for pre-existing conditions like age, education and gender of the microentrepreneurs. Table 6 shows that the F values were 17.45, 11.95, and 9.70 for personal agency belief, entrepreneurial self-efficacy and locus of control respectively, which were all significant at 0.01 level of significant. The F-statistics shows that entrepreneurship still significantly differ by finance category after adjusting for age, gender and education which are pre-existing conditions that may affect entrepreneurial ability. To have a clearer picture of the effect of membership of Cooperative Thrift and Credit society, the parameter estimates are in Table 7.

The parameter estimates shows that personal agency belief (entrepreneurship) will increase by 392.29 units from being a member of Cooperative Thrift and Credit society as compared to entrepreneurs who get finance from other sources. This will still occur even after taking into consideration pre-existing conditions of microentrepreneurs like age, education and gender, which might also affect their personal agency belief. As depicted above, membership of Cooperative Thrift and Credit society increased perceived self-efficacy by 6.399 and locus of control by 2.46 units as compared to getting finance from other sources. Education and gender were also significant; although gender had a negative impact (being a female reduced the chance of higher personal

agency belief). Age did not have any significant effect.

## DISCUSSION AND CONCLUSION

The results of the study indicate that members of Cooperative Thrift and Credit Societies in the study area were better entrepreneurs than non-members. This may be as a result of the interdependent nature of these societies and provision of accessible credit. Key characteristics of respondents such as gender and education had a significant effect on their entrepreneurial level. This study discovered that gender (being female) had a negative effect on personal agency belief while education had a positive effect. This is consistent with Van Praag's (2005) argument that the effect of gender is negative while that of education is positive on entrepreneurship. Membership of Cooperative Thrift and Credit Societies also predicts personal agency belief. Svendsen and Svendsen (2004) argue that positive externality is created through cooperation and Kalantaridis (2004) suggests that group based institutions are good for dealing with uncertainty. All these support the assertion that an interdependent society such as Cooperative Thrift and Credit Societies promotes entrepreneurship apart from the provision of loans.

The implication of these results is that the Federal Government of Nigeria may consider developing policies that will create an enabling environment for the development and proper operation of Cooperative Thrift and Credit Societies and other group based initiatives. This is important because societies like this could serve as an important mechanism for the support of entrepreneurs who are alert to opportunities in their environment. Informal finance could be developed and managed in such a way that their activities will generate a more desirable outcome. Microentrepreneurs feel comfortable borrowing from the informal sector. Even if the interest rate and collateral of banks is accessible to microentrepreneurs, they may still refuse to borrow from

<sup>2</sup> Exp (B) represents the ratio-change in the odds of the event of interest for a one unit change in the predictor

**Table 6.** Analysis of covariance: tests of between-subjects effects.

	<b>Locus of control</b>	<b>Perceived self efficacy</b>	<b>Personal agency belief</b>
Finance category (F-statistics)	9.70**	11.95**	17.45**
R-squared	0.22	0.21	0.31
Adjusted R-squared	0.21	0.20	0.30

\*\* Significant at the 0.01 level (2-tailed)

**Table 7.** Analysis of covariance: parameter estimates.

	<b>Locus of control</b>	<b>Perceived self efficacy</b>	<b>Personal agency belief</b>
Intercept	30.28**	69.42**	2152.03**
Gender	-1.49**	-2.90*	-229.67**
Age	-0.01	-0.01	-1.14
Education	0.23**	0.46**	31.63**
No Finance	1.61**	3.28**	201.96**
Cooperative finance	<b>2.46**</b>	<b>6.40**</b>	<b>392.29**</b>
Non-cooperative finance	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>

\*\* Significant at the 0.01 level (2-tailed), \* Significant at the 0.05 level (2-tailed), a = parameter is set to zero because it is redundant.

anything called a bank. The name “Bank” may be a disincentive for borrowing, so people should be encouraged to do things their own way while a regulatory framework compatible with the people’s value system is in place to check exploitation. In fact Audretsch et al. (2006) argue that banks are not appropriate for financing innovative firms.

### Limitation and Recommendation for Future Studies

The major limitation is the sample size and sampling procedure. The sample size for the study was selected through an appropriate procedure but it is small in relation to the number of microentrepreneurs in Nigeria. Inference about the general population of microentrepreneurs for the whole country may be difficult but communication with microentrepreneurs outside of the location of the study area indicated that the same situation applies although it was not be proved empirically. The smallness of the sample notwithstanding, it is representative of Osun State and can still be applied to southwestern Nigeria because the same culture prevails in this region. The researcher at times used his judgment in the selection procedure, for example, purposive sampling was used to select microentrepreneurs who were not members of Cooperative Thrift and Credit Societies in the study area because of lack of sampling frame. The use of purposive sampling notwithstanding, all the ten wards in Ife Central

Local Government, the three wards in Ife east and the some villages in Ife north were all covered.

This study measured entrepreneurship as personal agency belief (LOC\*SE). The effect of belonging to an interdependent group (Cooperative Thrift and Credit Societies) on personal agency belief was also assessed but other institutional factors that might affect entrepreneurship were taken as given. A study that is more ethnographic over a span of a minimum of five years will allow researchers to assess changes in the microenterprises as a result of government policy, cultural change etc. A larger survey covering the whole country would also be of potentially significant value.

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