

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Economic growth of any State is expected to generate the resources needed to lift people and nations out of poverty, raise standards of living, and support an active civic life. Yet, growth and its benefits do not extend to all parts of society evenly. Nor do all models of growth produce widespread opportunity. According to Connel, cited in Vieta, Tarhan, and Duguid (2016), in an early theorization of the term, collective entrepreneurship combines business risk and capital investment with the economic values of collective action, and exists when collective action aims for the economic and social betterment of a particular group of people for the production of goods and services by an enterprise. Collective entrepreneurship is the combination of collective risk-taking, resource pooling, and actions rooted in economic values and objectives that make collective entrepreneurship a compelling angle from which to approach the development of new cooperative initiatives.

Collective Entrepreneurship and Cooperative movement is historically rich and diverse in Osun State, taking root in the last 20 years of the State`s existence as a central organizational tool for the development of agriculture and rural communities, an alternative banking system via thrift and credit societies/unions Ltd, consumer provisioning, and worker cooperatives. The concept of collective entrepreneurship forms a sub-set of the broader concepts of entrepreneurship. Researchers have adopted different terms and definitions when referring to and analyzing business activities with collectively driven values, objectives, and entrepreneurialism, variably termed as “collective enterprises” What brings together these forms of collective businesses are strong group actions and group values supported by cooperative principles. But conceptual definitions of this type of business model, on the whole, vary, are still contested, and depend on the preponderance and degrees of welfare state or market-driven economic paradigms, and the legislative domains within national contexts.

Some schools of thought consider any groups innovative activities with a primary aim of promoting of members livelihood as collective entrepreneurial, without being too concerned with their ownership and management models. For instance, innovative business idea training and

development, skill acquisition training; risk sharing and social capital are also considered to be collective entrepreneurial activities. On the contrary, the European school argues that collective entrepreneurial activities derive from cooperative-led initiatives with an explicit aim to benefit their members, and thus must involve decision-making processes that are participatory and not based on capital ownership (Borzaga & Defourny, 2001; Defourny & Nyssens, 2012).

Emerging concept of collective entrepreneurship model, better reflect the Osun State experience with cooperative investment and credit societies limited role in financial inclusion that is grounded in the quality, usage and access to financial services and products, which are the outcomes of collective entrepreneurship. A Cooperative Entrepreneurship and collective entrepreneurship closely intersects with and often emerges from social movements. The cooperative, for instance, is one type of business model that has been understood as emerging from the people's needs of collective actions to achieve socio-economic change (Borzaga & Fazzi, 2014; Craig, 1993; Develtere, 1994, 1996; Diamantopoulos, 2012; McPherson, 2009; Spear, 2010).

Spear (2010) argues that cooperatives mobilize resources through distributed entrepreneurship, a term he coined in order to refer to circles of entrepreneurial activity. Circles of entrepreneurship connect the central roles played by the entrepreneurs within the organization, but link them intimately with wider groups (or circles) of external stakeholders sometimes quite closely and essentially involved. Spear further noted that external support within the various overlapping circles of distributed entrepreneurship is provided in two forms; formally through institutional support structures and informally through social capital.

The primary goal of Collective entrepreneurship in Cooperative Investment and Credit Society Limited is to promote the spirit of entrepreneurship among their members, nurturing entrepreneurial capacity and ability, and linking cooperative members to the mainstream of the economy through financial inclusion. The cooperative society encourages their members to collectively pool their resources to obtain innovative business ideas, efficient and innovative methods of production, train them on how to identify business opportunities, collective ownership of enterprise; risk sharing and social capital. Collective entrepreneurship tends to

provide the best setting of creativity and innovations for the development of member's enterprises which promote access, quality and usage of financial services and products among members of cooperative societies.

According to CBN (2016) report, many households have been excluded financially from the mainstream economy due to the lack of investment, and viable innovative enterprise where they can generate meaningful income and save their surplus. As a result of this, women, youth, minorities, and informal sector operators are underrepresented when it comes to access to financial products and services. The best way to get them included financially is to collectively involve them in the design of entrepreneurship activities which enable them to diversify their livelihood, while at the same time building their own enterprises and networks for inclusion. Collective entrepreneurship engagement among cooperative members supports and facilitates demand-driven financial inclusion, and allows interested groups to own an enterprise that change and improve their access to financial services like loan and savings.

Collective entrepreneurship is necessary to ensure that cooperative members' effective demand for financial services and products are sustained. According to Triki and Faye(2013), financial inclusion refers to all initiatives that make formal financial services available, accessible and affordable to all segments of the population. This requires giving particular attention to specific portions of the population that have been historically excluded from the formal financial sector either because of their income level and volatility, gender, location, type of economic activity, or level of financial literacy. In so doing, there is a need to harness the untapped potential of those individuals and businesses currently excluded from the formal financial sector or underserved, and enable them to develop their creativity capacity, business ideas strengthen their human and social capital to enable them engage in income-generating activities, and share risks associated with the joint enterprises. Financial inclusion goes beyond improved access to credit, to include enhanced quality, usage and access to savings and risk mitigation products, a well-functioning financial infrastructure that allows individuals and group of people to engage more actively in the economy, while protecting users' rights (Triki and Faye, 2013).

A distinctive combination of collective entrepreneurship and financial inclusion is often needed to reach traditionally disadvantaged populations. For instance, collective entrepreneurship and financial inclusion are important vehicles for representing, serving, and mobilizing economically excluded groups. Cooperative associations do represent groups effectively. Other intermediaries may establish channels for outreach and mechanisms to overcome barriers. In either case, building collective entrepreneurship abilities in target group of people is vital to gaining their insights and commitment to sustaining financial inclusion.

Raising interest of cooperative members in collective entrepreneurship is essential to fostering financial inclusion. Cooperative members must align innovative skills acquired in their cooperative society with the needs and demand of the markets. Fostering inclusive growth has become a global priority as a means toward building fairer and stronger societies. Inclusion is essential to sustaining growth, building the middle class, raising national competitiveness, and promoting social capital and economic inclusion. Entrepreneurship and financial inclusion goes beyond addressing the basic needs of the poor and vulnerable populations to actively engaging them in productive activities and helping them realize their full economic potential.

According to online version of the Vanguard (2017), one of the goals of Osun State government is to foster entrepreneurship development among its citizens through cooperative model because the State already has high rates of self-sustaining enterprises. What cooperative members need is not so much a greater quantity of micro-enterprises, but higher-quality startups and growing firms that are more productive and suited for investment. Scaling up firms around viable business models creates jobs and stimulates inclusion. This means orienting enterprises toward value creation; identifying unmet needs of customers and society, and ensuring profitability.

Cooperative societies in Osun State represent the fastest growing segments of the State workforce, yet in Osun State, low-income households, and workers of all sectors without advanced degrees have lost ground in the last four years due to economic recession. They were the worst hit by the economic downturn (recession) of Nigeria. In order to secure a prosperous future for Osun State, the policy makers in the State must implement a new socio-economic model that embraces equity, opportunity, democratic member control; solidarity and fairness as

an economic imperative. Collective entrepreneurship model is an inclusion tools strategies that explicitly connect low income groups and households to creative enterprises and productive economic activities and ensure that new enterprises offer family-supporting profits or income benefits, and growth opportunities that are essential for entrepreneurship development and securing Osun State competitiveness in the Nigerian economy.

1.2 Statement of the Problem

A survey conducted in Nigeria in 2008 by a development finance organization, the Enhancing Financial Innovation and Access (EFInA), cited in CBN (2015) report, revealed that about 53.0% of adults were excluded from financial services. The global pursuit of financial inclusion as a vehicle for economic development had a positive effect in Nigeria as the exclusion rate reduced from 53.0 % in 2008 to 46.3 % in 2010. Similarly, Financial Inclusion status as at December 2014 in CBN (2016) Newsletter shows that 36.3 percent representing 33.9 million citizens have access to formal deposit bank. In the same report, 12.3 percent, representing 11.2 million citizens, have access to other formal financial institutions, while 11.9 percent of the population representing 11.2 million patronizes informal financial institutions. In a summary, 60.5 percent of the total population is financially included, while the financially excluded is 39.5 percent, representing 36.9 million of people. The 36.9 million people that are excluded financially represent the sub-section of the population which indicate either they are low income earners or illiterate (CBN, 2016). The need and demand to access and utilize financial services and products will automatically arise if this section of the Nigerian population has a stable and viable investment or enterprises which the platform cooperative society can offer them through collective entrepreneurship.

This trend is an encouraging one for the Nigerian government, which has launched a new National Financial Inclusion Strategy in 2012, following Nigeria's commitment to the Maya Declaration of the Alliance for Financial Inclusion one year earlier. Despite the progress since 2009, about 40% of the adult population remains without formal or informal financial services. The rate is even higher in rural areas where half the population lives (CBN, 2016). Commenting

on the survey results, CBN, (2016)report stated that the government wants to bring financial exclusion down to 20%.

In spite of all these efforts in achieving financial inclusion, large number of adults are still been trapped and financially excluded (CBN, 2016). In order to reduce the number of financially excluded citizens, the cooperative society stand a better chance and they have a bigger role to play. More specifically, the Cooperative Investment and Credit Societies Limited (CICSL) have the potential to utilize its hidden collective entrepreneurship capacity to enhance and facilitate financial inclusion among its members. The CICSL is a type of cooperative society with intrinsic economic and social activities anchored on collective action which is embedded with sharing of innovative business ideas and joint risk taking that facilitates member's access and usage to financial products and service as well as to enhance the quality of financial service and products available to them.

Entrepreneurship and Financial inclusion are two different concepts that have continued to assume increasing recognition across the globe among governments of various level, policy makers, researchers and development-oriented agencies. Their importance derives from the promise they hold as a tool and driver for economic development, particularly in the areas of poverty reduction, employment generation, wealth creation and improving welfare and general standard of living. Their importance and contributions to economic development have been separately studied by many researchers and scholars over the years. There are numerous studies and literature (Shrivastava, 2013; Ogbo, & Agu 2012; Sarma, 2010; Massara and Mialou, 2014; Chakravarty, Satya and Rupayan Pal, 2010; etc.) on entrepreneurship and financial inclusion without much attempts to link the two concept together, that is, how collective entrepreneurship can trigger access and usage of financial services and products among the cooperative members. Based on these existing literatures and empirical evidence, a gap was identified and there is need to explore the relationship between the two concepts so as to fill the identified gap, and this study is determined to evaluate the influence of collective entrepreneurship on financial inclusion.

The idea of collective entrepreneurship in cooperative society is not a new concept, but, the potential and success of the cooperative in facilitating financial inclusion has not yet been widely recognized and this make the collective entrepreneurship and financial inclusion to look like a

new idea which is the focus of study for the researcher . Over the years, the cooperative with special reference to CICSLS in Osun State have been thriving in strengthening the financial inclusion among their members through their potentials in collective entrepreneurship. According to CBN reports in 2016, the Osun State Government has been commended by the Central Bank of Nigeria (CBN) for its pioneering Financial Inclusion role in the country with the collaborative efforts between and the cooperative societies in the State. In particular, Osun State government was commended for its plan to adopt the “Cooperative Model” for the establishment of MFIs as approved by the CBN.

The cooperative societies are becoming more successful as they collectively promote the wealth of its members through risk sharing; creative and innovative training, joint ownership, as well as social capital. The aforementioned can be achieved if there is an effective collective action on entrepreneurship. The presence of collective entrepreneurship in CICSLS can offer the cooperative the opportunity to capitalize on members talents together with innovative business ideas and collective energy. All these will contribute to a competitive advantage and an inclusion in the financial services and products (LED, 2006).

In spite of numerous efforts of Osun State government, the Federal Government, through CBN financial inclusion strategies and framework, as well as formal conventional financial institutions, efforts towards the integration of financially excluded people into the main-stream economy, much has not been really achieved as many people are still excluded financially. In this case there is urgent need to consider the potential of cooperative societies especially CICSLS as the best alternative platform to integrate people into the main stream economy and enhance their financial inclusion. Based on empirical and literary evaluation, there has been scarce or scanty research into the specific influence of the collective entrepreneurship (joint risk taking; joint ownership; innovative training and social capital) that imbues the financial inclusion among members of cooperative societies in Osun State. This study was borne out of the necessity to expose the collective entrepreneurship potentials of Cooperative Investment and Credit Society Limited which include activities like joint risk taking; joint ownership; innovative training and social capital that enhance and facilitate financial inclusion among its members.

How often cooperative members access and utilize these financial products and services depends on the extent to which they are able to participate and benefit from the collective risk sharing; joint ownership of enterprise; innovative business training and social capital which are the components and indices of entrepreneurship. Therefore, this study is much concerned with the demand dimension of financial inclusion (usage; accessibility and quality) which could be triggered by their involvement in collective risk sharing; joint ownership of enterprise; innovative business training and social capital. This study sees access, usage and quality of financial services and products as necessary and sufficient conditions for measuring the financial inclusiveness of cooperative members in Osun State.

Furthermore, access, usage and quality of financial services and products can be useful in addressing questions of academic; policy and national interest that have been put forward in this study. Some of them are (i) Does the amount invested in the risk sharing ventures of cooperatives influence members access, usage, and quality of savings? (ii) Is there any linear relationship between joint/collective ownership enterprise and members accessibility to loan facilities of the cooperative society? (iii) Does innovative and creative business training of members influence their usage of savings and loan facilities? (iv) Can there be relationship between social capital and members' savings quality? In order to provide answers to these questions, this study is challenged to determine the extent which collective entrepreneurship components (independent variables, i.e risk sharing; joint ownership of enterprise; innovative business training and social capital) influence financial inclusion indicators (dependent variables. i.e access to financial services and products; usage of financial services and products, as well as quality of financial services and products).

1.3 Objectives of the Study

The broad objective of this study is to examine the influence of collective entrepreneurship on financial inclusion among members of Cooperative Investment and Credit Societies Limited (CICSL) in Osun State, Nigeria.

Specifically, the study is to;

- i. determine the extent to which the amount cooperative members invested in risk sharing joint enterprise of cooperative influences their usage of savings;
- ii. examine the nature of relationship that exist between collective ownership of cooperative enterprises and financial inclusion in terms of members access, usage and quality of loan facilities in CICSL;
- iii. ascertain the correlation between innovative business training the cooperative members received and financial inclusion in terms of access; usage and quality of loan facilities in CICSL;
- iv. examine the nature of relationship that exists between social capital (i.e solidarity; mutual aid; social reasonability etc) and members usage and quality of savings in CICSL;
- v. Proffer robust policy implications on how to enhance financial inclusion among cooperative members through collective entrepreneurship

1.4 Research Questions

In order to fill the gap identify from the study problem statement, the following research questions are raised so as to obtain responses that will be used to bridge the gap. The research questions formulated are as follows;

- i. To what extent does the amount cooperative members invested in risk sharing enterprise of cooperative influences their usage of the savings facilities of Cooperative Investment and Credit Societies Limited (CICSL)?
- ii. What is the nature of the relationship between collective/joint ownership enterprises and members' access, usage, and quality of loan facilities?
- iii. To what extent do innovative/creative business training cooperative members received relate to their access, usage and quality of loan facilities?
- iv. Is there any relationship between social capital and CICSL member's savings usage and quality in Osun State?
- v. In what ways can financial inclusion through collective entrepreneurship be further enhanced among cooperative members?

1.5 Hypotheses of the Study

Hypotheses are formulated to strengthen the research questions of this study were in null form:

H₀₁: The amount of money cooperative member invests in joint risk enterprises of cooperative has no significant influence on their usage of savings facilities in Cooperative Investment and Credit Society Limited;

H₀₂: Collective ownership of enterprises has not significantly influenced members' access, usage and quality of loan facilities in CICSL;

H₀₃: Innovative/creative business training of cooperative members has not significantly facilitated cooperative member's access, usage and quality of loan facilities in CICSL

H₀₄: Social capital has no significant effect on member's savings usage and quality of savings in CICSL.

1.6 Significance of the Study

This research proposed the notion of collective entrepreneurship as a subset of co-operative entrepreneurship. It explored how collective entrepreneurship model in Osun State is expressed in the innovation of enterprises, risk sharing, processes, and outcomes of its members' desires for financial inclusion. Ideological development in the founding of a collective entrepreneurship, equality in the distribution and mobilization of entrepreneurship resources, multi-vocality for democratic decision-making, collective learning and innovative skills acquisition.

This research adds to current understanding of financial inclusion and collective entrepreneurialism. The researcher approach could be replicated and extended in future research.

This research will be of interest to entrepreneurs, cooperative studies researchers, policy makers, cooperative apex organizations, and co-operative practitioners. The significance of this study is further explained as follows:

- i. Entrepreneurs from various sectors of the economy will benefit from the result of the study when completed. The entrepreneurs will see the importance of collective entrepreneurship model as a platform to acquire various degrees of entrepreneurial support services and it will be needful for them to join cooperative society of their choice if they want to compete favourably.
- ii. Researchers will also benefit from this study since it is a recent study that tries to establish a link between collective entrepreneurship and financial inclusion. Therefore, this study provided basis for empirical evidence and literature for future studies on the same subject matter.
- iii. This study will be useful to the policy maker, as it provided basis for framework to establish relationship between collective entrepreneurship and financial inclusion and formulate policy that facilitates and strengthens financial inclusion through collective entrepreneurship for the benefit of the citizens, especially the cooperative members.
- iv. Finally, the cooperative practitioners will see important roles played by the cooperative society towards financial inclusion. With that, they will be able to commit more efforts towards the development of cooperative movement through collective entrepreneurship.

1.7 Scope of the Study

The study evaluated the effect of collective entrepreneurship model on financial inclusion among the members of Cooperative Thrift and Investment and Credit Society Limited in Osun State.

The scope of the study is exclusive and restricted to the following areas:

- i. There are two approaches to the study of collective entrepreneurship. The first is from the perspective of already established entrepreneurs pooling their resources and idea together and forming cooperative society in order to promote their individual enterprise and group enterprise. The second perspective is when cooperative society is trying to provide creative entrepreneurial support activities for their members in order to bring the spirit of entrepreneurship out of them. In this case, this study was restricted in its approach as it

focused on the collective entrepreneurial activities provided by the cooperative societies for their members.

- ii. The parameters of interest for the study were cooperative members within Cooperative Zones of Osun State. The study was however limited to 3 cooperative zones in Osun State that are highly concentrated with Cooperative Investments and Credit Societies Limited.
- iii. The study was also restricted to micro economic perspective as it was only focus on activities of individual component within the economic system. That is, how individual enterprises behave and take decision in participating in the collective entrepreneurial activities, and how such cooperative members access financial inclusion indicators within the economy for the last five years.
- iv. The financial inclusion in the context of this study was restricted to demand approach. That is, that the study was only focused on how the cooperative members accessed and utilize the available financial services and product delivered by the CICSL and not how financial institutions supply the financial services and products to cooperative members. In this context, financial inclusion was measured in terms of access, usage and quality of financial services like loan and savings within the Cooperative Investment and Credit Societies Limited in Osun State.
- v. Collective entrepreneurship indices were restricted to risk sharing; collective innovation training, collective ownership investment, and social capital.

These collective entrepreneurship indices were measured as follows, Risk sharing was measured in terms of the amount the cooperative members have invested in the joint investment of the cooperative society while collective training and innovation sharing was measured in terms of the creative business ideas and skills acquired by the cooperative members through their cooperative society. The collective ownership of enterprise was measured in terms of various types of physical investment owned and controlled by the members, while the social capital aspect of collective entrepreneurship

was measured from the perspective of members' contributions to cater for one another in form of solidarity, self-help and mutual benefits.

- vi. Finally; collective entrepreneurship model was restricted to Cooperatives Investment and Credit Societies Limited (CICSL) that have been operating for minimum of five years, as well as members that had minimum membership of five years within Osun State.

1.8 Definition of Key Terms

The following concepts are the common and frequent terms used for this study and they are being defined by the researcher within the context of this study. The key terms are defined as follows:

Entrepreneurship: Entrepreneurship is the ability and willingness of someone called entrepreneur to perceive and create a new economic opportunities and introduce innovative ideas into the market with the motive of making profit in the face of uncertainty and other obstacles.

Collective Entrepreneurship Model: Collective entrepreneurship is a model of entrepreneurship in cooperative society that involves group collective actions that connote the jointly-owned venture in a cooperative society, with economic relations between members, who provide resources such as labor, skills, creative/innovation sharing, joint enterprise and capital, in exchange for some share of the return and risks of the enterprise. Collective entrepreneurship is often embedded in existing social capital and personal relationships with members in terms of solidarity and mutual benefits.

Cooperative Investment and Credit Society Limited (CICSL): This is one of the types of cooperative society in Osun State that is much involved in pooling the resources together among its members in forms of contributions and savings and disbursing credit to needy members in forms of loan. Also this type of cooperative society is much concerned with investments in various sectors of the economy which all the members are entitled to share the returns and risk that will be accrued from such investment based on what they have contributed in the society.

Inclusion: This act of or state of being major part of main-stream. The act of getting involved or be a major actor or player in economic activities.

Financial Inclusion: Financial inclusion in this context is seen as the extent which the cooperative members gained access to financial services; usage of financial services; and the quality of the products and the service delivery.

1.9 Limitations of the Study

There are a lot of challenges encountered during this academic exercise and they were probably managed. The most significant limitation faced by the researcher on the process of conducting this study includes;

Distance: This was one of the most difficult barriers for the researcher because the study was conducted in Osun State while the researcher state of residence is Anambra State. As result of this the researcher found it difficult to be shuttling the long distance between Osun State and Anambra State during the period of conducting this research. But, this was properly handled so it did not affect the quality and process of the study. To God is the glory.

Time: This another challenge faced by the researcher time, due to the busy schedule of the researcher the allotting time between official assignment and this study was a difficult decision and the researcher was able to effectively perform his official assignment and complete his study without one affecting each another.

Uncooperative Attitude: The cooperative officials and members at initial stage were not cooperating with the researcher as most of them failed and disagree to release some information and data which they considered to be sensitive and classified. But when they observed the determination and commitment of the researcher they responded positively to the needs of the researcher.

There are other limitations encountered when conducting this study but the researchers considered them not to be significant since they were effectively handled and managed without any negative effects on the study

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter is concerned with the review of the previous literature that is relevant to collective entrepreneurship and financial inclusion. The chapter is organized in different sub-sections where the first section presented the review of important concepts of the study. The second section discussed theoretical reviews which is the adoption of relevant theories for the study. The third was based on the empirical review of result and outcomes of previous studies that are relevant to the subject of the matter. The fourth sub-section of this chapter elucidated a conceptual framework of this study depicting the operationalization of the study variables. The last sub-section was the critique of the existing literature, summary and the identification of the research gaps from the existing and previous studies.

2.1 Conceptual Review

2.1.1 Concept of Cooperative

A cooperative enterprise is that which belongs to the people who use its services, own it and control it with the members. The gains are distributed to the members in proportion to the use of its services. It is a legal entity that accomplishes an economic objective through joint participation of its members. The investment and operational risks, benefits gained, or losses incurred are shared equitably by its members. It is democratically controlled by members based on their status as users but not investors (Makongoso, 2016). It is formed and organized for marketing, processing and value addition. It is an enterprise characterized as user owned because the users of the services own it and are the main providers of the equity capital, user-controlled because the users of the services decide on the strategies and policies. The user benefits because the surplus is distributed to the members based on their use; thus, members benefit is in proportion to their patronage.

The focus of this discourse is the Cooperative Investment and Credit Society Limited (CICSL), which may also practically related to as the credits and thrift co-operative or the thrift and loans co-operatives. All these cooperatives perform functions that are practically related. The core function of CICSL is to improve access to credits at critical moments or more succinctly, financial intermediation. Principally, such cooperatives aim at making it easier for people

(especially people with low income) to save, thereby increasing the amount of money available for lending to members. Loans and credits are provided to members with easier conditions when compared with other formal and informal financial institutions

The investment and credits cooperative is the earliest of cooperatives to have been formed worldwide and also in Nigeria. A cooperative investment and credit society is a member-owned cooperative society, democratically controlled by its members, and operated for the purpose of facilitating investment; promoting thrift, providing credit at competitive rates, and providing other financial services to its members. In the same vein, Cooperative Investment and Credit Society Limited (CICSL) in Osun State constitutionally create funds to be lent to their members for productive purposes. They establish viable projects and enterprises like industries, housing and farming project etc; buy development stocks; treasury bills securities, as well as any other measure designed on cooperative principles to instill in its members' the spirit of thrift, mutual-help and self-help (State of Osun CICSL Bye Law, 2016).

CICSL differ from other Micro Financial Institutions (MFIs) in that those who have accounts in the credit cooperative society are its members and owners. According to CUNA Model Credit Union Act (2007), they elect their Board of Directors in a one-person-one-vote system regardless of their amount invested. CICSL see themselves as different from mainstream financial institutions, with a mission to be community-oriented and serve people, not profit

CICSL offers many of the same financial services as other Micro Financial Institutions (MFIs), but often using a different terminology; common services include share accounts (savings accounts), share draft accounts (checking accounts), credit cards, share term certificates (certificates of deposit), and online banking (CUNA Model Credit Union Act, 2007). Normally, only a member of a CICSL may deposit or borrow money (CUNA Model Credit Union Act 2007). Surveys of customers at MFIs and CICSL have consistently shown a significantly higher customer satisfaction rate with the quality of service at CICSL. The CICSL have historically claimed to provide superior member service and to be committed to helping members improve

their financial situation. In the context of financial inclusion CICSL claim to provide a broader range of loan and savings products at a much cheaper cost to their members than do most MFIs.

In the CICSL context, "not-for-profit" is not the same as for a "non-profit" charity or similar organization. CICSL are "not-for-profit" because their purpose is to serve their members rather than to maximize profits (woccu.org.2010). But, unlike charities and the like, CICSL do not rely on donations, and are financial institutions that must perform what is, in economic terms, a small profit (i.e., in non-profit accounting terms, a surplus) to remain in existence (woccu.org.2010). According to the World Council of Credit Unions (WOCCU, 2014), a credit cooperative society revenues (from loans and investments) must exceed its operating expenses and dividends (interest paid on deposits) in order to maintain capital and solvency. F.W. Raiffeisen wrote in 1870 that credit cooperative society "are, according to paragraph eleven of the German law of cooperatives, 'merchants' as defined by the common code of commerce. They accordingly form a sort of commercial business enterprise of which the owners are the credit cooperative members.

According to the World Council (WOCCU, 2014), at the end of 2014 there were 57,480 credit unions in 105 countries. Collectively they served 217.4 million members and oversaw US\$1.79 trillion in assets. The World Council does not include data from co-operative banks. For example, some countries generally seen as the pioneers of credit unionism, such as Germany, France, the Netherlands and Italy are not always included in their data. The European Association of Cooperative Banks reported 38 million members in those four countries at the end of 2010.

The countries with the most credit union activity are highly diverse. According to the World Council, the countries with the greatest number of credit union members were the United States (101 million), India (20 million), Canada (10 million), Brazil (6.0 million), South Korea (5.7 million), Philippines (5.4 million), Kenya and Mexico (5.1 million each), Ecuador (4.8 million), Australia (4.5 million), Thailand (4.1 million), Colombia (3.6 million) and Ireland (3.3 million).

The countries with the highest percentage of credit union members in the economically active population were Barbados (82%), Ireland (75%), Grenada (72%), Trinidad & Tobago (68%), Belize and St. Lucia (67% each), St. Kitts & Nevis (58%), Jamaica (53% each), Antigua and Barbuda (49%), the United States (48%), Ecuador (47%) and Canada (43%). Several African and Latin American countries also had high credit union membership rates, as did Australia and South Korea. The average percentage for all countries considered in the report was 8.2%. Credit unions were launched in Poland in 1992. As of 2012, there were 2,000 credit union branches there with 2.2 million members (WOCCU, 2014).

Modern CICSLS history dates from 1852, when Franz Hermann Schulze-Delitzsch consolidated the learning from two pilot projects, one in Eilenburg and the other in Delitzsch in the Kingdom of Saxony into what were generally recognized as the first credit cooperative society in the world. He went on to develop a highly successful urban credit cooperative society. In 1864, Friedrich Wilhelm Raiffeisen founded the first rural credit cooperative society in Heddesdorf (now part of Neuwied) in Germany. By the time of Raiffeisen's death in 1888, credit cooperative societies had spread to Italy, France, the Netherlands, England, Austria, and other nations (WOCCU, 2014).

The first credit cooperative society in North America, the Caisse Populaire de Lévis in Quebec, Canada, began operations on January 23, 1901, with a 10-cent deposit. Founder Alphonse Desjardins, a reporter in the Canadian parliament, was moved to take up his mission in 1897 when he learned of a Montrealer who had been ordered by the court to pay nearly C\$5,000 in interest on a loan of \$150 from a money lender. Drawing extensively on European precedents, Desjardins developed a unique parish-based model for Quebec: the *caisse populaire*.

In the United States, St. Mary's Bank Credit Union of Manchester, New Hampshire was the first credit union. Assisted by a personal visit from Desjardins, St. Mary's was founded by French-speaking immigrants to Manchester from Quebec on November 24, 1908. America's Credit Union Museum now occupies the location of the home from which St. Mary's Bank Credit

Union first operated. On November 1910 the Woman's Educational and Industrial Union set up the Industrial Credit Union, Modeled on the Desjardins credit unions it was the first non-faith-based community credit union serving all people in the greater Boston area. The oldest statewide credit union in the US was established in 1913. The St. Mary's Bank Credit Union serves any resident of the Commonwealth of Massachusetts (Guardian Newspaper. 11 May 2013).

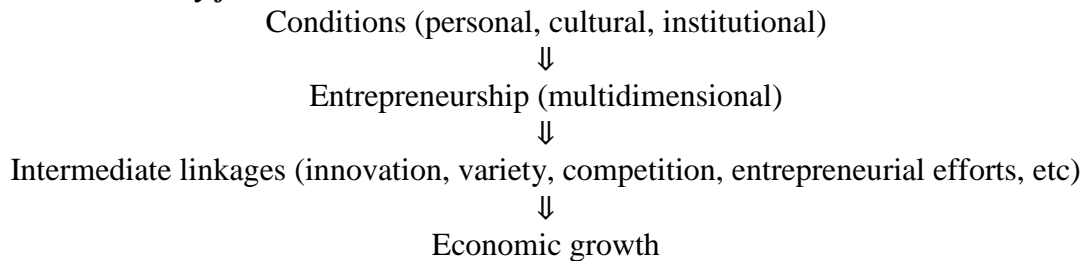
After being promoted by the Catholic Church in the 1940s to assist the poor in Latin America, credit unions expanded rapidly during the 1950s and 1960s, especially in Bolivia, Costa Rica, the Dominican Republic, Honduras and Peru. The Regional Confederation of Latin American Credit Unions (COLAC) was formed and with funding by the Inter-American Development Bank credit unions in the regions grew rapidly throughout the 1970s and into the early 1980s. In 1988, COLAC credit unions represented 4 million members across 17 countries with a loan portfolio of circa half a billion US dollars. However, from the late 1970s onwards, many Latin American credit unions struggled with inflation, stagnating membership and serious loan recovery problems. In the 1980s, donor agencies such as USAID attempted to rehabilitate Latin American credit unions by providing technical assistance and focusing credit unions' efforts on mobilizing deposits from the local population. In 1987, the regional financial crisis caused a run on credit unions. Significant withdrawals and high default rates caused liquidity problems for many credit unions in the region(WOCCU, 2014).

2.1.2 Concept of Entrepreneurship

Conceptualizing entrepreneurship is an ill-defined, multidimensional concept. The difficulties in defining and measuring the extent of entrepreneurial activities complicate the measurement of their impact on economic performance. Understanding their role in the process of growth requires a framework because there are various intermediate variables or linkages to explain how entrepreneurship influences economic growth. Examples of these intermediate variables are innovation, variety of supply, entry and exit of firms (competition), specific efforts and energy of entrepreneurs, etc. (Carreea, and Thurika, 2002)

Figure 1 shows some conditions for entrepreneurship. These conditions include personal traits that lie at the origin of entrepreneurship and cultural and institutional elements.

Figure 1 Introductory framework



Source: Wennekers and Thurik, (1999) cited in Carreea and Thurika, (2002)

Entrepreneurship has to do with activities of individual persons. The concept of economic growth is relevant at levels of firms, regions, industries and nations. Linking entrepreneurship to economic growth means linking the individual level to aggregate levels. In order to consider this link, we first pay attention to a definition of 'entrepreneurship'. Inspired by Hébert and Link (1989), Bull and Willard (1993) and Lumpkin and Dess (1996), the following definition of entrepreneurship can be proposed: Entrepreneurship is the manifest ability and willingness of individuals, on their own, in teams, within and outside existing organizations to perceive and create new economic opportunities (new products, new production methods, new organizational schemes and new product-market combinations), and to introduce their ideas in the market, in the face of uncertainty and other obstacles, by making decisions on location, form and the use of resources and institutions (Wennekers and Thurik (1999), cited in Carreea and Thurika (2002)). Essentially, entrepreneurship is a behavioral characteristic of persons. It should be noted that entrepreneurship is not an occupation and that entrepreneurs are not a well-defined occupational class of persons. Even obvious entrepreneurs may exhibit their entrepreneurship only during a certain phase of their career and/or concerning a certain part of their activities.

According to Shrivastava (2013), Entrepreneurship has at two meanings: First, entrepreneurship refers to owning and managing a business. This is the occupational notion of entrepreneurship i.e. creation of new business. Second, entrepreneurship refers to entrepreneurial behavior in the sense of seizing an economic opportunity. This is the behavioral notion of entrepreneurship. The

entrepreneur, therefore, is someone who specializes in making judgmental decisions about the coordination of scarce resources. The term emphasizes that the entrepreneur is an individual. As Schackle cited in Shrivastava (2013) wrote, entrepreneur is a maker of history, but his guide in making it is his judgment of possibilities and not a calculation of certainties, and identified uncertainty bearing as the economic function of the entrepreneur. According to Schumpeter, the entrepreneur is the prime mover in economic development and his function is to innovate. It is defined and established in traditional theories that investment in new knowledge increases the technology opportunity set and sharpens the ability to look into the future. Entrepreneurial activity thus could be very well understood as the activity that holds the discovery, evaluation and exploitation of opportunities within the defined established framework and how these opportunities are discovered exploited is related to institutional arrangement of the country or the individual. Four types of ventures: independent start-ups; spin-offs; acquisitions; corporate ventures have been identified (Shrivastava, 2013).

Rumelt (2005) defined entrepreneurship as the creation of new businesses, and by new he meant businesses that do not exactly duplicate existing businesses but have some element of novelty. For example, the entrepreneur may be opening a convenience store in a hitherto untried location, may have developed a new product or a new production technology, may have a new way of promoting a product, may have identified a novel market segment, or may be betting on a novel method of distribution. Rumelt did not automatically equate entrepreneurship with the creation of new organizations or ventures, although Rumelt was concerned with the conditions impeding internal entrepreneurship. If entrepreneurial activity is seen as motivated by the chance for gain, its frequency, locus, and organizational context should be determined by the availability of entrepreneurial insights, by the potential returns to entrepreneurship, and by the entrepreneur's ability to attract the requisite resources. A good working theory of entrepreneurship would begin with these principles and develop connections to observable and predictable phenomena. It would be useful, for example, to be able to characterize the systematic differences in the potential for entrepreneurial gain across product groups, industries, and societies. In addition, it would be good to have more precise understanding of the types of structural and contractual arrangements that facilitate or impede entrepreneurial activity.

Entrepreneurship is not synonymous with small business. Certainly, small firms are an outstanding vehicle for individuals to channel their entrepreneurial ambitions. The small firm is an extension of the individual in charge (Lumpkin and Dess, 1996). However, entrepreneurship is not restricted to persons starting or operating an (innovative) small firm. Enterprising individuals in large firms, the so-called 'intrapreneurs' or 'corporate entrepreneurs', undertake entrepreneurial actions as well. In these environments there is a tendency of 'mimicking smallness', for instance using business units, subsidiaries or joint ventures. Because in colloquial speech many terms like entrepreneurs, self-employed and businessmen are used indiscriminately, its operationalization and measurement are far from obvious. However, one can make some pragmatic distinctions between the concepts entrepreneurial and managerial in the sense of organizing and coordinating. Second distinction between business-owners or self-employed (including owner-managers of incorporated firms) and the employees. Based on this double dichotomy of self-employed versus employee and entrepreneurial versus managerial, three types of entrepreneurs may be distinguished. These three types are the Schumpeterian entrepreneurs, the intrapreneurs and the managerial business owners who are entrepreneurs in a formal sense only.

Schumpeterian entrepreneurs are found mostly in small firms. They own and direct independent firms that are innovative and creatively destroy existing market structures. After realizing their goals, Schumpeterians often develop into managerial business owners, but some may again start new ventures. Intrapreneurs or entrepreneurial managers also belong to the core of entrepreneurship. By taking commercial initiatives on behalf of their employer, and by risking their time, reputation and sometimes their job in doing so, they are the embodiment of leadership resulting in entrepreneurial ventures in larger firms. Sometimes these entrepreneurial employees, either in teams or on their own, spin off, start new enterprises and become Schumpeterian entrepreneurs. Managerial business owners (entrepreneurs in a formal sense) are to be found in the large majority of small firms. They include many franchisees, shopkeepers and people in professional occupations. They belong to what Kirchoff (1996) calls 'the economic core' and are the seedbed for some of the entrepreneurial ventures.

According to Makongoso (2016) the classical scholars of entrepreneurship introduced an entrepreneur as an innovator that brings change, an alert arbitrageur that acts on opportunities in an uneven economic system, a decision maker in pure uncertainty and a coordinator where the basic underlying thought is that entrepreneurs create opportunities. In classical theory, entrepreneurship takes account of flexibility in operations and control systems with an aim to promote innovation. The mechanisms refer to administrative behaviour, which constitutes entrepreneurial culture, reward system, strategy, and people, hence, elements of entrepreneurship, organization culture, strategic orientation, and reward system Makongoso (2016).

Entrepreneurship is the process of designing, launching and running a new business, which is more often than not, initially a small business, offering a product, process or service for sale or hire. The people who create these businesses are called entrepreneurs. Also, Entrepreneurship is the act of being an entrepreneur, or an owner or manager of a business enterprise who makes money through risk and initiative. Entrepreneurship has been described as the capacity and willingness to develop, organize and manage a business venture along with any of its risks in order to make a profit. While definitions of entrepreneurship typically focus on the launching and running of businesses, due to the high risks involved in launching a start-up, a significant proportion of businesses have to close, due to lack of funding, bad business decisions, an economic crisis or a combination of all of these or due to lack of market demand. According to Wikipedia, (2017), in the 2000s, the definition of entrepreneurship expanded to explain how and why some individuals (or teams) identify opportunities, evaluate them as viable and then decide to exploit them, whereas others do not and, in turn, how entrepreneurs use these opportunities to develop new products or services, launch new firms or even new industries and create wealth. Recent advances stress the fundamentally uncertain nature of the entrepreneurial process, because although opportunities exist their existence cannot be discovered or identified prior to their actualization into profits. What appears as a real opportunity ex ante might actually be a non-opportunity or one that cannot be actualized by entrepreneurs lacking the necessary business skills, financial or social capital.

Business News Daily (2017) sees Entrepreneurship as a complex term that's often defined simply as running your own business. But there's a difference between a business owner and an entrepreneur, and although one can be both, what distinguishes entrepreneurship is a person's attitude. Bachenheimer, in Business News Daily (2017), believed that entrepreneurship is much broader than the creation of a new business venture. At its core; it is a mindset a way of thinking and acting. It is about imagining new ways to solve problems and create value. Passion is the real drive. An entrepreneur possesses an interior fuel and stamina that drives their actions, he said. This superior energy helps to overtake and surpass the different challenges, and it injects strength to continue pursuing goals when difficulties arise. In another Business News Daily article (2017), successful entrepreneurs are typically confident and self-motivated. They are tenacious but understand their own limitations. Instead of following the status quo, entrepreneurs have a healthy disrespect for established rules and often set out to do things that others may not have the courage to pursue. They are also willing to fail and start over again; internalizing the lessons they've learned to create something new and improved. An entrepreneur is someone who can take any idea, whether it be a product and/or service, and have the skill set, will, and courage to take extreme risk to do whatever it takes to turn that concept into reality and not only bring it to market but make it a viable product and/or service that people want or need.

Classical economists viewed entrepreneurs as wealth creators and that their capabilities arise from the ability to identify opportunities and make decisions in an existing set of circumstances as economic development and predicting opportunities are discovered in the entrepreneurial process (Katsikis & Kyrgidou, 2014). Growth of an enterprise is an annual average greater than twenty percent per annum, over a three-year period with ten or more employees at the beginning of the observation period. Growth which is measured by the number of employees and turnover plays a key role in addressing important policy issues such as reducing unemployment and creating jobs` (Makongoso, Gichira & Orwa, 2015). The assumption underlying firm growth in the model characterizing Gibrat's Law is that growth is normally distributed and occurs randomly. It is the framework provided by the knowledge of entrepreneurship, which focuses on how new knowledge can influence the cognitive decision making process inherent in the entrepreneurial decision to start a firm (Makongoso, *etal*2015).

Jovanovich, as cited in Dawson, De Meza, & Arabsheibani(2014) acknowledged that entrepreneurs are unsure about their ability to manage a new firm start-up and their prospects for success only to discover their true ability in terms of managerial competence as they base the firm on a viable market once their business is established. The assumption underlying Gibrat's Law is that firm's growth is a stochastic process and is randomly distributed across firms, and that it is independent of firm-specific characteristics such as firm size, age, research and development, innovation and finance. The classic study by Penrose as cited in Blundel (2016) stated that management is a team effort in which individuals deploy specialized, functional specific team skills to enable collective coordination of many activities in a coherent manner.

The knowledge that underlies these specific skills is tacit, and only learned experientially or by direct instruction from existing managers (Makongoso,*etal* 2015). The theory states that for a firm to expand, it needs to recruit managers to manage the process, offer productive services and take up productive opportunities through distinctive use of resources such as technologies.

Entrepreneurship, according to Onuoha (2007), "is the practice of starting new organizations or revitalizing mature organizations, particularly new businesses generally in response to identified opportunities." Schumpeter cited in Eroğlu & Piçak (2011) defined entrepreneurs as individuals who exploit market opportunity through technical and/or organizational innovation. Similarly, Knight and Drucker in Eroğlu & Piçak (2011) suggested that entrepreneurship is about taking risk. Bolton & Thompson (2000) equally defined an entrepreneur as a person who habitually creates and innovates to build something of recognized value around perceived opportunities. Hisrich (1990) defined that an entrepreneur is characterized as someone who demonstrates initiative and creative thinking, is able to organize social and economic mechanisms to turn resources and situations to practical account, and accepts risk and failure". Thomas & Mueller (2000) argue that the study of entrepreneurship should be expanded to international markets to investigate the conditions and characteristics that encourage entrepreneurial activity in various countries and regions. It is reasonable to expect that entrepreneurs reflect the dominant values of his or her national culture and national culture has definite effect on entrepreneurship

2.1.3 Concept of Collective

The concept collective elicits images of aggregate societal levels well above the individual such as regions, group, nations or global associations. Collective denoting a number of persons or things considered as one group or whole. Tiessen, cited in Are (2008), for instance, studied individualism and collectivism as value systems on a national level. Furthermore, collectivism is a paradigm in the never-ending debate about the relationship between the collective and the individual agency focusing on the collective forces that impel the actor. Collective conscience, for instance, was Dürkehims conception of a macro-level system of beliefs and sentiments. In an extreme collectivistic point of view collective conscience is an independent cultural system that determines individual behavior. Collective action refers to the joint effort of an association of individuals to further a common interest or to secure a common goal (Olson, in Are, (2008).

According to Vocabulary.com (2017) Collective is a word that describes a group of people acting together. The word collective indicates a group, and is often used in opposition to the efforts or will of an individual. Outside the sphere of established institutions, collective action takes the form of social movements, in which the members may belong to different self-help or status groups. Collectives are not automatically communities. As Weber noted, a community is more than a class or category of people sharing the same economic or market situation. A community assumes interpersonal mutuality between members of the collective, an “in-group” disposition between them.

In a similar vein, Johannissons (1998) notion of the collective “relates to Tönnies notion of “Gemeinschaft” and the Krapotkinian image of “mutual aid” and solidarity. These images pointed at the direct interaction between members of the collective” (Johannisson, 1998). Here we shall understand the concept of collective as such an in-group actions. Following Johannisson, this view emphasizes how members interaction, solidarity and trust preserves membership than how goals and interests determine why members participate in groups or organizations (Olson, in Are (2008).

The collective can be seen as; (a) the idea that although all ideas originate in some individuals mind, every individual’s recognition of new opportunities appears in some social context, and b)

the idea that entrepreneurship becomes collective when opportunities are acted upon because new venture creation requires joint collective action. The last conception is most evident in Schoonhoven and Romanelli (2001). Some writers discuss how organizing the new venture demands a collective effort. For instance, how the coordinated efforts from many individuals and institutions provide cognitive and socio-political legitimacy needed to create new markets (Aldrich and Fiol, 1994). Others touch upon the importance of the collective as a context of confidants (i.e. such as business associates, friends or family) with whom the entrepreneur tests and conceptualizes her business ideas. One way to elaborate this is to say that entrepreneurship occurs when an individual takes some element out of the strictly private and makes an intentional choice to focus others' attention on it. Conceptions like entrepreneurial cultures and innovative networks imply that the collective contributes even at the point of opportunity recognition (Are, 2008).

Wikipedia (2017) sees concept of collective as a group of entities that share or are motivated by at least one common issue or interest, or work together to achieve a common objective. Collectives can differ from cooperatives in that they are not necessarily focused upon an economic benefit or saving, but can be that as well. The term collective is sometimes used to describe a species as a whole, for example, the human collective. Collectives are sometimes characterized by attempts to share and exercise political and social power and to make decisions on a consensus-driven and egalitarian basis.

2.1.4 Concept of Collective Entrepreneurship

The concept of collective entrepreneurship can be used when the decisions about deployment of assets are taken not by an individual but by a group of people. The need to take decisions as a group results from the joint ownership of assets. Joint ownership leads to joint decision-making. This implies that it is not the judgment of the individual that applies, but the combined judgment of a group of individuals. The intra-group differences in judgment over the proper use of the joint assets bear on the efficiency of the decision-making process. The more heterogeneous the judgments, for instance about what constitute good investment projects, the more difficult the decision making process.

Miles *et al.* (2005) used the term collective entrepreneurship to define collaboration among entrepreneurial firms in a community or network of firms. In their view, collaborative entrepreneurship is the matching of underutilized resources with unexplored market opportunities to commercialize a constant stream of innovation in a community of networked firms. The emphasis in collaboration among the independent firms in the network is on value creation through continuous innovation (and not on value distribution). Within the community of networked firms, there is much trust as members treat ideas as a common resource and collaboratively exploit capabilities.

According to Jos & Bart (2015), both collective entrepreneurship and collaborative entrepreneurship comprise of three types of relationship. First, the jointly-owned venture is an economic entity, with economic relations between co-founders, who provide resources such as labor, skills, knowledge, experience and capital, in exchange for some share of the return to the enterprise. Second, there is an organizational relationship among co-founders, and between co-founders and joint venture. Finally, collective entrepreneurship involves interpersonal relationships. Collective is often embedded in existing social and personal relationships with friends, neighbors, family, or other community members. Typical examples of collective entrepreneurship are strategic alliances among firms that share a part of their R&D activities, or among firms that collaborate in tightly coordinated supply chains (Child *et al.*, 2005). There are at least three main differences between collective entrepreneurship and collaborative entrepreneurship. First, in collective entrepreneurship, the income of the member firms depends to a large extent on the performance of the jointly-owned firm. In collaborative entrepreneurship, the jointly-owned firm is much more independent. Often, the joint venture is sold, after a while, through an IPO, thus becoming independent from the parent companies, or it is acquired by one of the parent companies. Second, collaborative entrepreneurship is more dynamic than collective entrepreneurship. Alliances are often temporary, and/or partners change often. Alliances could even take up a network form. Third, in collaborative entrepreneurship, the emphasis is mainly on (a) learning and knowledge exchange or (b) complementary assets. In collective entrepreneurship, traditionally the emphasis has been on economies of scale and scope through joint investment in tangible assets, while more recently joint learning has become important.

According to Panagiota & Nastis (2011), literature review on Entrepreneurship reveals that there are many new directions that explore the idea that entrepreneurship emerges as a function of collective action (Schoonhoven & Romanelli, 2001) and how group dynamics influence collective entrepreneurial action (Burress & Cook, 2009; Felin & Zenger, 2007; Ruef, Aldrich, & Carter, 2003; West, 2007). These researchers consider the role of multiple actors when analyzing the entrepreneurial function, exploring variables like entrepreneurial opportunities, community dynamics, path dependence, social context and local origins (Burress & Cook, 2009). Additionally, they provide precious interpretations of the term “collective entrepreneurship”. Burress and Cook (2009) after examining 240 articles that explain this term, suggested that researchers describe the term “collective entrepreneurship” according to 5 different types of motives.

According to the first motivation, one basic concern to the domain of entrepreneurship is the advancement of a strong theory from which to base scholarly research (Low, 2001). A second motivation for research regarding entrepreneurship investigates the view that collective entrepreneurship is a powerful tool for increasing intra-firm efficiency. This happens because by reducing collective decision-making costs and agency costs, cooperatives or firms can utilize resources more efficiently. There are three fundamental directions in this category of literature: the first one deal with the challenges of self-management, the second one considers the knowledge management and the third focuses on ownership structure.

The third motivation explores inter organizational gains. There are mutual gains that can be achieved through strong cooperation and organizational hybrids in markets (networks, alliances, industrial districts and franchise agreements) (Marshall, 1890). The fourth motivation investigates the notion that interactive, collective processes may enhance innovation, commercialization and economic development. Important point is that collective entrepreneurship has critical ramifications for economic growth and local development. Collective entrepreneurship empowers members' profits and regional development by three basic mechanisms: strategic alliances focusing on common marketing plans, access to technological innovations and resources and finally on local development strategies. The last category of motivation refers to initiatives to affect change with respect to regional and local development,

public policy and social and cultural norms. In this paper, we are mainly focusing on these two last motivations.

Researchers exploring collective entrepreneurship as a form of socio-political change (5th motive) are referring to entrepreneurial activity that integrates economic, social cultural and political goals (Bataille-Chetodel & Huntzihger, 2004; Chouinard & Forgues, 2002; Connell, 1999). Many of the investigations into collective entrepreneurship focusing on regional and local development stem from initiatives and policies to support the social economy (Graefe, 2006; Laville, 2003; Spear, 2000). Chouinard and Forgues (2002) suggest entrepreneurship may occur on a continuum from “private entrepreneurship that first and foremost satisfies the needs of the owners, to collective entrepreneurship geared towards serving the association of workers and the community’s interests”. Practical examples of collective entrepreneurship in the social economy literature include non-profit organizations, cooperatives, foundations, voluntary organizations, public interest groups and social movements (Burress & Cook, 2009; Spaey, 2004).

In the view of Burress & Cook (2009), Entrepreneurship research, was once predominately focused on the individual entrepreneur, is increasingly interested in the influences of group dynamics, founding teams, and collective entrepreneurial action (Aldrich, 1999; Felin & Zenger, 2007; Jonsson, 1995; Ruef, Aldrich, & Carter, 2003; Schoonhoven & Romanelli, 2001; West, 2007). Burress & Cook (2009) see a myriad of new directions for entrepreneurship research that explore the idea that entrepreneurship emerges as a function of collective action (Schoonhoven & Romanelli, 2001). These nascent themes consider the role of multiple actors when analyzing the entrepreneurial function, exploring such variables as network ties, path dependence, social context, local origins, community dynamics and joint conceptualization of entrepreneurial opportunities. As frameworks for analyzing entrepreneurship broaden to include mention of collective aspects, researchers and practitioners rely more heavily on the term collective entrepreneurship

Burress & Cook (2009) primer on collective entrepreneurship surveys various interpretations of the term collective entrepreneurship, categorizes the theoretical and practical motivations for investigating collective entrepreneurship, and provides examples of the wide array of

institutional and organizational manifestations deemed collective entrepreneurship. Although Burrell & Cook, (2009) discussed the work of authors who utilize the term collective when referring to entrepreneurship when relevant, they focused primarily on the use of the specific phrase collective entrepreneurship. This nuance allows us a common basis upon which to compare and contrast the use of the term itself as well as prevailing motivations for an interest in collective entrepreneurship. To identify, categorize, and explain the various uses of the term collective entrepreneurship, Burrell & Cook(2009) conducted a comprehensive, cross-disciplinary literature review. After surveying 240 articles that explicitly address the term collective entrepreneurship, they suggested that the predominant motivations for research in collective entrepreneurship fall into five general categories: theoretical advancement, intra-organizational efficiency, inter-organizational gains, economic growth and development, and socio-political change. While these categories are not meant to be mutually exclusive, they allow the researcher to present the reader with a simple framework to more readily understand the nature of current streams of research in collective entrepreneurship, their theoretical underpinnings, and their practical benefits.

Soriano & Urbano (2008) opined that entrepreneurial organizations have the capacity to form collaborative relationships. In collaboration, each party accepts responsibility for its own inputs, as well as for the equitable sharing of returns on outputs. In this sense, the origin of this collaborative phenomenon can be seen in certain examples involving strategic alliances among large organizations a developmental partnership that can take various forms or industrial districts. Nevertheless, the emergence of collaborative entrepreneurship as a recent phenomenon of interest describes an organization composed of firms from different industries, whose collaborative abilities allow them to pursue a joint strategy of continuous innovation (Miles *et al.* 2005). Moreover, in this description, two characteristics must be emphasized: (i) collaborative relationships are voluntary, and (ii) collaborative relationships facilitate knowledge creation, and, in turn, continuous innovation. Beyond collective entrepreneurship, continuous innovation can be achieved within the confines of existing businesses, through collaboration among employees and groups. In this sense, the importance of teams in the innovation process is emphasized. Therefore, building a business model to innovate in a continuous way also depends on how

employees collectively understand their world, and how they function in collaborative activities, e.g., in making decisions, estimating the effects of possible actions, allocating appropriate resources etc. Collective entrepreneurship is the term generally used to refer to entrepreneurial teams and to collaboration among employees. It is therefore an important domain to explore, and it is fundamentally different from the aggregation of firms in collaborative communities. On the contrary, the collective perspective represents a bridge between individuals in a team and actions taken with regard to team decisions. In this sense, Johannisson (1998) presented entrepreneurship as a collective phenomenon that is as much the outcome of a joint effort as an individual endeavor.

Johannisson (1998) pointed out that a better understanding of entrepreneurship will be achieved if all enterprising and organizing, including entrepreneurial venturing, are recognized as generically collective; a collective image of venture projecting applies from the gestation period and throughout the existence of the firm. From an academic point of view, corporate entrepreneurship or intrapreneurship is one of the most powerful innovation approaches for studying the formation of collective entrepreneurship. The process of corporate entrepreneurship reflects the birth of new businesses within existing organizations, i.e., internal innovation or venturing, and the transformation of organizations thorough renewal of the key ideas on which they are built, i.e., strategic renewal. Through this process, a business can enrich its performance by creating new knowledge that becomes a foundation for building new competencies or revitalizing existing ones. Under this broad conception, Schumpeter's in Soriano, & Urbano (2008) view can also be perceived of the entrepreneur as one who "carries out new combinations," but in this case the entrepreneur is more likely to be plural (Gartner, Shaver, Gatewood, & Katz, 1994). Often, functional departments can become too specialized and isolated from the rest of the organization. Cross-functional work teams can provide a platform for cross-organizational communication, resulting in more integrated and strategically aligned organizational cultures, products and services. For this reason, it is important to note that, firms that have previously developed a strong capacity for collaboration among their employees are likely to develop collaborative communities in the future. Consequently a firm's ability to collaborate with other firms starts with being able to collaborate internally (Miles *et al.* 2005).

Linara (2017) define collective entrepreneurship as persons conducting business together with at least one partner, sharing ownership with them. Collective entrepreneurship can be, in our opinion, one of the means of risk diversification and fund-raising. According to the GEM Russia 2007 APS data 45,8% of current and nascent entrepreneurs (43,4% in 2006) can be classified as collective. Usually about 3 partners conduct a joint venture.

In the present context it is rather important to understand what distinguishes collective entrepreneurs from individual if there are any differences between them. According to Linara (2017) Judging from the GEM Russia 2007 APS data, the following specifics could be mentioned: The portion of collective entrepreneurs is significantly higher among new and established business owners (32-33% in 2007) comparing to potential entrepreneurs (15%). At the same time, latent entrepreneurs tend to be collective much more frequently than any other (74%). We can assume that potential entrepreneurs either incline to have individualistic strategy or don't make any concrete plans and don't have any notion of whether to have partners or not. Nascent entrepreneurs, in their turn, try to get partners in order to anticipate market constraints since they are only starting their new ventures. On average, collective entrepreneurs are younger than individual. The mean age of the former group is about 31 years whilst the mean age of the latter is 25 years. Collective entrepreneurs are less confident in their abilities to run business their knowledge, skills and experience. Consequently, one of the reasons for them to get partners is necessity to raise the human capital involved in conducting business. Collective entrepreneurs more frequently than individual entrepreneurs assess situation in their region as favourable for business start-up.

Collective entrepreneurship can be characterized as opportunity-based more often than individual one. Collective entrepreneurs start their businesses not because of necessity but because they seek after self-realization and improvement of their opportunities. The structure of income differs significantly between collective and individual entrepreneurs. The former have a greater portion of income coming from their business ventures. This can be a result of both a higher rate of not potential entrepreneurs but business owners among them and, consequently, their greater experience and enterprises' life longevity. The structure of collective entrepreneurs' social capital is considerably different from that of individuals. The former are acquainted with other

businessmen twice oftener than the latter (42% and 21% respectively). This result is quite evident since the notion of collective entrepreneurship presupposes having broad business ties.

The concept of collective entrepreneurship was in large part developed by Johannisson (1998) in Spear and Roger (2010) cited that it is building on a tradition of acknowledging a collective aspect to the emergence of social enterprises and it is meant that the 'entrepreneur' often consists of a coalition of individuals or actors rather than just a single individual. Collective entrepreneurship includes among others the setting up of cooperatives. It demonstrates what insights gained when entrepreneurship is generically collective. The concept collective is well above individuals and refers to a joint effort of an association of individuals with an aim to further a common interest or secure a goal. It is an idea of every individual's recognition of new opportunities and thereafter entrepreneurship becomes collective when opportunities are acted upon because new venture creation requires joint collective action. Collective entrepreneurship occurs when an individual takes some element out of strict privacy and makes an intentional choice to focus others' attention on it.

The concept is most evident, as organizing new ventures demand a collective effort, for instance, coordinated efforts from individuals to create new markets. It is the collective confidence with which the entrepreneur tests and conceptualizes business ideas and involves the study of opportunities, processes, and exploitation of opportunities and characteristics of individuals to discover, evaluate, and introduce new ideas in the market (Soriano & Urbano, 2008). The common example of collective entrepreneurship is the cooperative form of organization and most of this type of organization arises in the Agricultural sector, where cooperatives have more than a century of importance. The question is whether entrepreneurial activity (innovation, new products, and new market) occurs at the level of the collective as an organization strategy or at the level of the individual member-farmer. Study by Burress and Cook (2009) indicated that Collective entrepreneurship suggests that emerging entrepreneurs utilize networks to access human and financial capital, as well as to transfer legitimacy to their ventures and that it empowers members' profit and development through strategic alliances focusing on marketing, technical innovations and resources. The actors who jointly seized an opportunity referred to as collective entrepreneurs (Iliopoulos, 2004).

Peredo and Wurzelmann (2015) identified advantages of collective entrepreneurship over individual entrepreneurship as the ability to lend diverse sets of skill, extending organization and personal networks and increased legitimacy with disadvantages as additional effort and time required to develop strategies, different ideologies and policy change. Collective entrepreneurship involves an income generating organization governed by a plurality of shareholders assigned voting rights and distribution of residual income in proportion to shareholding to generate income. Collective entrepreneurship can assume a dual meaning in the cooperative literature thus entrepreneurial action among multiple patrons and multiple organizations described as cooperation among cooperatives (Cook & Plunkett, 2006).

2.1.4.1 Components (Indices) of Collective Entrepreneurship

The review of collective entrepreneurship from various researchers and scholars establishes common salient indices that can be used to measure collective entrepreneurship. These common components/indices are:

- Collective Risk Sharing
- Collective creative business ideas and innovation sharing and training
- Collective Enterprise Ownership
- Social Capital

2.1.4.2 Collective Risk Sharing

Risk sharing is the practice of distributing risks amongst member's organizations, departments, teams or individuals. A self-insurance method of managing or reducing exposure to risk by spreading the burden of loss among several units of an enterprise or business syndicate. Risk retention pools formed with the contributions of participants are often utilized as a way to self-insure risks among multiple entities (investorwords, 2017). Risk sharing may provide opportunities for an organization to mitigate risks. For example, resource risks shared between multiple teams may provide opportunities to share resources and reduce risk. Also, risk sharing can be used as a strategy to improve the commitment of stakeholders to a project. Risk management may be preferable to risk shifting by distressed companies and institutions. The risk management strategy focuses on balancing risk and return to generate cash flow that is sufficient

to meet financial obligations, rather than taking the “shoot the lights out” approach of risk (Investopedia, 2017).

Holton (2004) argues that there are two ingredients that are needed for risk to exist. The first is uncertainty about the potential outcomes from an experiment and the other is that the outcomes have to matter in terms of providing utility. Risk is a word that has various meanings to various people. It is a word that causes the feeling of urgency because it addresses detrimental, sometimes catastrophic outcomes. Risk is an important concept in a number of discipline and fields, yet there is no consensus on how it is to be defined and interpreted. Some of the definitions are based on probabilities, others on expected values, some on uncertainty and others on objectives. Some authors regard risk as subjective and epistemic, depending on the knowledge available, some regard it as aleatoric, due to the probabilistic character of certain parameters, while yet others give risk the ontological status independent from the person assessing it. Risk is the measure of probability and the weight of undesired consequences (Lawrence, in Šotić, & Rajić, 2015). Risk equals the triplet (s_i, p_i, c_i) , where s_i is the set of scenarios, p_i is the likelihood of that scenario, and c_i the consequence of the scenario, $i = 1, 2, \dots, N$ (Kaplan & Garrick, 1981). Risk is a combination of five primitives: outcome, likelihood, significance, causal scenario and population affected (Kumamoto & Henley, 1996).

Risk is a situation or event where something of human value (including humans themselves) has been put at stake and where the outcome is uncertain. (Rose 1998). Risk is the expression of influence and possibility of an accident in the sense of the severity of the potential accident and the probability of the event. Risk is a combination of the probability and scope of the consequences. Risk is an uncertain consequence of an event or activity related to something of human value. Risk is the likelihood of an injury, disease or damage to the health of employees due to hazards. Risk refers to uncertainty about and severity of the events and consequences (or outcomes) of an activity with respect to something that humans value (Aven & Renn, 2009).

The definitions of risk stated are commonly used in practice. They can be categorized in several groups, in which risk is expressed: 1. By means of uncertainty and expected values 2. Through events/consequences and uncertainty; 3. In relation to objectives. Various attempts have been

made to establish a uniform viewpoint on risk, but none of them has been widely accepted in practice. This is due to various reasons. - Firstly, scientific work on risk may not have fully developed for establishing such a general definition, i.e., there still remains research to be conducted. Secondly, the scientific literature focuses on the creation of new ideas, propositions and paradigms, as well as on the criticism of other contributions. Naturally, it is difficult to reach a broad consensus on scientific matters in general, and on the definition of risk in particular. - Thirdly, organizations responsible for standardization are generally not capable of creating definitions broad and precise enough to be accepted by the scientific community (Šotić, & Rajić, 2015).

Given the ubiquity of risk in almost every human activity, it is surprising how little consensus there is about how to define risk. The early discussion centered on the distinction between risk that could be quantified objectively and subjective risk. In 1921, Frank Knight summarized the difference between risk and uncertainty thus: Uncertainty must be taken in a sense radically distinct from the familiar notion of Risk, from which it has never been properly separated. The essential fact is that "risk" means in some cases a quantity susceptible of measurement, while at other times it is something distinctly not of this character; and there are far-reaching and crucial differences in the bearings of the phenomena depending on which of the two is really present and operating. It will appear that a measurable uncertainty, or "risk" proper, as we shall use the term, is so far different from an un-measurable one that it is not in effect an uncertainty at all. Some definitions of risk tend to focus only on the downside scenarios, whereas others are more expansive and consider all variability as risk. Consequence in lost money, in contrast, risk in finance is defined in terms of variability of actual returns on an investment around an expected return, even when those returns represent positive outcomes.

The term business risk refers to the possibility of inadequate profits or even losses due to uncertainties e.g., changes in tastes, preferences of consumers, strikes, increased competition, change in government policy, obsolescence etc .Every business organization contains various risk elements while doing the business. Business risks implies uncertainty in profits or danger of loss and the events that could pose a risk due to some unforeseen events in future, which causes business to fail. Business risks can arise due to the influence by two major risks: internal

risks (risks arising from the events taking place within the organization) and external risks (risks arising from the events taking place outside the organization).

A risk in a business context is anything that threatens an organization's ability to generate profits at its target levels. In the long term, risks can threaten an organization's sustainability. Business risks are broadly categorized as pure risks, which are negative events over which the organization has no control, and speculative risks, which are potential effects of actions taken and choices made that may have positive and/or negative effects. Another model categorizes business risks as internal (resulting from events with the organization) and external (resulting from events occurring outside the organization).

According to security expert Harris (2016), once a business risk has been identified, an organization has four options: transfer it, avoid it, reduce it or accept it.

Risk analysis programs are designed to help an organization deal as effectively as possible with existing or potential threats. The four main elements of risk analysis are:

- Identifying corporate assets and assessing their value.
- Identifying vulnerabilities and threats to the security of those assets.
- Quantifying the probability of those threats and their potential impact on the business.
- Compare the potential economic impact of the threat versus the cost of the counter-measures required to protect the organization from it.

2.1.4.3 Collective Creative Business Ideas and Innovation Sharing and Training

Training is teaching, or developing in oneself or others, any skills and knowledge that relate to specific useful competencies. Training has specific goals of improving one's capability, capacity, productivity and performance. It forms the core of apprenticeship and provides the backbone of content at institutes of technology. In addition to the basic training required for a trade, occupation or profession, observers of the labor-market recognize the need to continue training beyond initial qualifications: to maintain, upgrade and update skills throughout working life. Creativity and innovation through entrepreneurship is everyone's business with a lens to each link of the innovation; value chain; idea generation; conversion, and diffusion. Most entrepreneurship efforts fail not because of a lack of bright ideas, but rather a lack of careful

follow up. Training empowers someone to ignite and embed ideas that will fundamentally improve his or her business. According to Board of Innovation, (2017), research has shown that innovating business model can create up to 25 times the competitive advantage compared to product and process innovation. However, Board of Innovation found that only 17% of the companies have looked at their business model and compared it with the competitors. It's time to change that focus.

Innovation means more than just new products or services. It means improving the process of creating those products, or selling them, or experiencing them, or even improving the ways we manage the people who do all of the above. Berkun (2017) believed that innovation is significant positive change that change can apply to products and processes, or it can apply to people. Recently, the Institute for Corporate Productivity (2016) published a study surveying some of the top companies and people in the fields of management and innovation. They examined some of the best people management practices at organizations known for innovation and found several ways that those companies develop and manage their human capital.

In summarizing their findings, here are 10 human capital practices that drive innovation:

- Use Technology to Collaborate and Share Knowledge. Collaboration drives creativity and innovation, and social media and conferencing technologies can help bring people together (or virtually together) more often for that collaboration.
- Promote Innovation as an Organizational Value. The most innovative companies didn't just luck into hiring creative people; they placed creative and even average people into creative cultures.
- Include Innovation as a Leadership Development Competency. Part of building an innovative culture is having leaders who value creativity, and are creative themselves.
- Tie Compensation to Innovation. The jury is still deliberating the influence of incentives on creativity, but their use in organizations sends a signal that innovation is valued. That signal is an important part of culture building.

- Develop an “Idea-finding” Program. As we’ve discussed elsewhere, it’s not enough to have great ideas. Innovative companies build a system that taps into the collective knowledge of everyone and lets everyone promote good ideas.
- Fund outside Projects. It might sound counterintuitive to allow funding to develop projects that are technically outside your organization, but as market boundaries continue to blur, strategic innovation partnerships become even more important.
- Train for Creativity. Creativity isn’t innate. Creative thinking skills can be developed and the most innovative companies fund training programs to develop them.
- Create a Review Process for Innovative Ideas. Even the best ideas don’t come fully formed. There is a process to refining, developing and identifying the ideas with the most market potential. Creating a review process allows this to happen and signals that innovative ideas are valued.
- Recruit for Creative Talent. Especially at the undergraduate and graduate levels. The war for talent is slowly shifting its focus from quantitative minds to creative ones.
- Reward Innovation with Engaging Work. Research demonstrates that companies that are able to identify their most creative employees can enhance their creative ability by providing them autonomy to work on projects that are naturally interesting to them.

These ten practices might not be a prescription for how to shift a stuck culture to a creative one, but they are a good start. Consistently, innovative companies are engaged in some or all of these practices.

Collective creative business ideas and innovation sharing and training in cooperative society is any attempt by group actions to improve current or future cooperative and its member’s performance by increasing a member’s ability to perform through learning, usually by changing the members’ attitude or increasing his or her skills and knowledge.

2.1.4.4 Collective Enterprise Ownership

Collective enterprise is a business entity created by two or more parties, generally characterized by shared ownership, shared returns and risks, and shared governance. Most joint ownership is incorporated in different sectors of the economy. People enter into collective enterprise ownership agreement to access a new market, particularly emerging markets; to gain scale efficiencies by combining assets and operations; to share risk for major investments or projects; or to access skills and capabilities. when two or more persons come together to form and collectively operate a joint enterprise for the purpose of promoting their socio economic wellbeing can be referred to as collective enterprise.

According to Financial Conduct Authority (2017), collective enterprise is an enterprise into which two or more persons enter for commercial purposes related to a business or businesses (other than the business of engaging in a regulated activity) carried on by them. Where a participator is a member of a group, each other member of the group is also to be regarded as a participator in the enterprise. Collective business system or collective business model is a business organization or association typically composed of relatively large numbers of businesses, tradespersons or professionals in the same or related fields of endeavor, which pools resources, shares information or provides other benefits for their members. In the past, collective business systems such as the trade association, the cooperative and the franchise were created to allow groups of independently-owned businesses with common interests to successfully compete in the market-place.

According to LaMance (2017), a joint enterprise is an informal relationship between two or more parties in which each party contributes their skill, efforts, knowledge, or money to achieve a common purpose. The joint enterprise is typically limited to a single event or transaction. The basic defining characteristic of a joint enterprise is that the parties share a common purpose which is to be carried out by the group. In a collective enterprise, each party may be held liable for the wrongdoings of the other participants. This is similar to the concept of joint liability and collective risk sharing as it is obtainable in cooperative society. The main difference between a joint enterprise and a joint venture is the purpose for which the association is formed. In a joint

enterprise, the common purpose may be general, such as research, non-profit activities, or leisure activities.

Collective enterprise ownership, according to Wikipedia (2017) is the ownership of means of production by all members of a group for the benefit of all its members. The breadth or narrowness of the group can range from a whole society to a set of coworkers in a particular enterprise (such as one collective farm). In the latter (narrower) sense the term is distinguished from common ownership and the commons, which implies open-access, the holding of assets in common, and the negation of ownership. Collective ownership of the means of production is the defining characteristic of collective entrepreneurship where collective ownership can refer to ownership by all of society or to cooperative ownership by an organization's members. It more commonly refers to group ownership (such as through a cooperative organization) as contrasted with public ownership.

2.1.4.5 Concept of Social Capital

Social capital is an economic idea that refers to the connections between individuals and entities that can be economically valuable. Social networks that include people who trust and assist each other can be a powerful asset. These relationships between individuals and companies can lead to a state in which each thinks of the other when something needs to be done. Along with economic capital, social capital is a valuable mechanism in economic growth. As technological advancements continue to make the world smaller and the global population more interconnected, companies and association like cooperative society rely on social capital more than ever to drive business. While in decades past, companies could rely on persuasive marketing to get customers in the door, in the 21st century; those customers are plugging into social networks and relying on their peers to direct them to a provider when a business need arises (Investopedia, 2017).

According to Bourdieu (1983), social capital is the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition. Coleman (1994) defined social capital by its function. It is not a single entity, but a variety of different entities, having two characteristics

in common. They all consist of some aspect of a social structure, and they facilitate certain actions of individuals who are within the structure. Putnam (2000) refers to physical objects and human capital relates to the properties of individuals. Social capital refers to connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them. In that sense, social capital is closely related to what some have called “civic virtue.” The difference is that “social capital” calls attention to the fact that civic virtue is most powerful when embedded in a sense network of reciprocal social relations. A society of many virtuous but isolated individuals is not necessarily rich in social capital. World Bank (1999) refers to the institutions, relationships, and norms that shape the quality and quantity of a society’s social interactions. Social capital is not just the sum of the institutions which underpin a society – it is the glue that holds them together.

Social capital permeates many aspects of the business world, including companies acquiring new customers and individual job-seekers finding employment. A person who knows somebody at a company where he is applying for a job and uses this connection to secure the position has benefited from social capital in his employment search. Likewise, an insurance agent who joins a local church or civic organization and uses the relationships he builds within to acquire new clients and increase his book of business has also employed social capital.

According to Putnam (2017), the central premise of social capital is that social networks have value. Social capital refers to the collective value of all “social networks” (who people know) and the inclinations that arise from these group of people to do things for each other (“norms of reciprocity) just like self-help and mutual help as it can be found in cooperative association. The term social capital emphasizes not just warm and cuddly feelings, but a wide variety of quite specific benefits that flow from the trust, reciprocity, information, and cooperation associated with social groups. Social capital creates value for the people who are connected and at least sometimes for bystanders as well. The concept of social capital can be easily found in the cooperative organization values of self-help, mutual help, solidarity as well as equality. These are the unique attributes of cooperative organization that distinguish them from all other investor-owned firms.

Putnam (2017) highlighted multiple channels through which social capital works within group of self-help and mutual help group these channels are:

- ✓ Information flows (e.g. learning about jobs, learning about innovative business ideas, exchanging ideas, etc.) All these depend on social capital.
- ✓ Norms of reciprocity (mutual help) rely on social networks. Bonding networks that connect group members who are similar sustain particularized (in-group) reciprocity. Bridging networks that connect individuals who are diverse sustain generalized reciprocity. This channel is concerned with cooperative value of self-help; and mutual help, among group of people who shared similar vision and interest.
- ✓ Collective action depends upon group of people working together collectively so as to promote their wellbeing, although collective action also can foster new networks.
- ✓ Broader identities and solidarity are encouraged by social networks that help translate an “I” mentality into a “we” mentality.

The channel of social capital provide by Putman is a typical example of how cooperative society operate on the unique value of self-help and mutual help with goal of promoting the wellbeing of the members who have similar interest through collective action and joint enterprise.

According to Smith, (2009), the notion of social capital is said to have first appeared in Lyda Judson Hanifan’s discussions of rural school community centers. He used the term social capital to describe ‘those tangible substances that count for most in the daily lives of people. Hanifan was particularly concerned with the cultivation of goodwill, fellowship, sympathy and social intercourse among those that ‘make up a social unit’ like group or association. It took some time for the concept of social capital to come into widespread usage. In relation to urban life and neighbourliness, Bourdieu (1983) with regard to social theory, and then Coleman (1988) in his discussions of the social context of education moved the idea into academic debates. However, it was the work of Putnam (1993; 2000) that launched social capital as a popular focus for research and policy discussion. ‘Social capital’ has also been picked up by the World Bank as a useful

organizing idea. They argue that ‘increasing evidence shows that social cohesion is critical for societies to prosper economically and for development to be sustainable’ (World Bank in Smith, 2009). Smith further explored the idea of social capital where he reviewed some of the evidence with regard to the claims made about it, and assessed its significance for educators.

Field (2003) believed that the central thesis of social capital theory is that ‘relationships matter’. The central idea is that ‘social networks are a valuable asset’. Interaction enables people to build communities, to commit themselves to each other, and to knit the social fabric. A sense of belonging and the concrete experience of social networks (and the relationships of trust and tolerance that can be involved) can, it is argued, bring great benefits to people (Smith, 2009).

Smith (2009) sees trust between individuals thus becomes trust between strangers and trust of a broad fabric of social institutions; ultimately, it becomes a shared set of values, virtues, and expectations within society as a whole. Without this interaction, on the other hand, trust decays; at a certain point, this decay begins to manifest itself in serious social problems. The concept of social capital contends that building or rebuilding community and trust requires face-to-face encounters. (Beem, 1999)

There is now a range of evidence that communities with a good ‘stock’ of such ‘social capital’ are more likely to benefit from lower crime figures, better health, higher educational achievement, and better economic growth (Halpern 2009). However, there can also be a significant downside. Groups and organizations with high social capital have the means (and sometimes the motive) to work to exclude and subordinate others. Furthermore, the experience of living in close knit communities can be stultifying – especially to those who feel they are ‘different’ in some important way (Smith, 2009).

The three thinkers that most commentators highlight in terms of developing a theoretical appreciation of social capital are Pierre Bourdieu, James Coleman and Robert Putnam. Bourdieu wrote from within a broadly Marxist framework. Smith (2009) began by distinguishing between three forms of capital: economic, cultural and social. A basic concern was to explore the

processes making for unequal access to resources and differentials in power and the ways in which these fed into class formation and the creation of elites. He understood social capital to be the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition (Bourdieu in Smith 2009). The possession of social capital did not necessarily run alongside that of economic capital, but it still was, in his view, an attribute of elites, a means by which particular networks held onto power and advantage. Field (2003) presumed that social capital generally functions to mask the naked profit-seeking of its holders, and is, therefore, inimical with the open democratic society like cooperative society that he espoused in his journalism and political activism (Field, 2003).

Coleman's (1988) contribution to the development of the notion of social capital was to theorize it in a way that illuminated the processes and experiences of non-elite groups. In other words, he argued that those living in marginalized communities or who were members of the working class could also benefit from its possession. Drawing upon a base of rational choice theory, James Coleman (1990, 1994) looked to social capital as part of a wider exploration of the nature of social structures. He argued that social capital was defined by its function. 'It is not a single entity, but a variety of different entities, having two characteristics in common: they all consist of some aspect of a social structure, and they facilitate certain actions of individuals who are within the structure' (Coleman, 1994). However, Foley and Edwards (1999) and others have pointed out, a number of problems flow from defining social capital by its function. In particular, the same 'outcome' could flow from very different processes. However, Coleman's explorations were to highlight the possibility that different institutions and social structures were better suited to the cultivation of reciprocity, trust and individual action than others. Like other social investigators he highlighted the role of the family and kinship networks, and religious institutions in the creation of social capital. He believed that changes in both spheres were problematic. They were less able to socialize in appropriate ways; ties appeared to be looser and weaker.

Bourdieu's treatment of social capital is somewhat circular. In summary it boils down to the thesis that privileged individuals maintain their position by using their connections with other privileged people. Coleman's view is more nuanced in that he discerns the value of connections

for all actors, individual and collective, privileged and disadvantaged. But Coleman's view is also naively optimistic. As a public good, social capital is almost entirely benign in its functions, providing for a set of norms and sanctions that allow individuals to cooperate for mutual advantage and with little or no 'dark side'. Bourdieu's usage of the concept, by contrast, virtually allows only for a dark side for the oppressed, and a bright side for the privileged. (Field, 2003).

It was into this situation that Robert Putnam's work on social capital exploded. Returning to commentators such as de Tocqueville, and drawing on some of the debates around, and insights from, Coleman's contribution, he looked to the significance of association and civic community (Putnam 1993). He wrote from a background in political science and, as such, brought out some important dimensions. Based initially on a detailed study of Italian political institutions, he argued for the significance of social capital and the quality of civic life in the cultivation of democratic society. He then turned his attention to social capital in the United States – first in an influential article (Putnam 1995) then in a major study: *Bowling Alone*. In the latter Putnam discussed social capital as follows:

Whereas physical capital refers to physical objects and human capital refers to the properties of individuals, social capital refers to connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them. In that sense, social capital is closely related to what some have called "civic virtue." The difference is that "social capital" calls attention to the fact that civic virtue is most powerful when embedded in a sense network of reciprocal social relations. A society of many virtuous but isolated individuals is not necessarily rich in social capital. (Putnam, 2000)

2.1.4.5.1 Why Social Capital Is Important

First, social capital allows citizens to resolve collective problems more easily. People often might be better off if they cooperate, with each doing her share.

Second, social capital greases the wheels that allow communities to advance smoothly. Where people are trusting and trustworthy, and where they are subject to repeated interactions with fellow citizens, everyday business and social transactions are less costly.

A third way in which social capital improves our lot is by widening our awareness of the many ways in which our fates are linked... When people lack connection to others, they are unable to test the veracity of their own views, whether in the give or take of casual conversation or in more formal deliberation. Without such an opportunity, people are more likely to be swayed by their worse impulses.

The networks that constitute social capital also serve as conduits for the flow of helpful information that facilitates achieving our goals.... Social capital also operates through psychological and biological processes to improve individual's lives. ... Community connectedness is not just about warm fuzzy tales of civic triumph. In measurable and well-documented ways, social capital makes an enormous difference to our lives.

2.1.5.2 Types of social capital

Those concerned with social capital have looked to the density of social networks that people are involved in; the extent to which they are engaged with others in informal, social activities; and their membership of groups and associations. Their big worry is that in the USA, for example, there has been a significant decline in the active membership of associations (like PTAs, football teams and community groups) and a corresponding increase in individualized leisure activities (most especially watching television). For example, there has been drop in the number of people involved in league (team) bowling and a growth in individual bowling (hence the title of Putnam's (2000) book – *Bowling Alone*). The result is that social capital is weakened.

2.1.4.5.3 Varieties of social capital

There's much debate over the various forms that social capital takes, but one fairly straightforward approach divides it into three main categories:

Bonds: Links to people based on a sense of common identity (“people like us”) such as family, close friends and people who share our culture or ethnicity.

Bridges: Links that stretch beyond a shared sense of identity, for example to distant friends, colleagues and associates. Bridges encompasses more distant ties of like persons, such as loose friendships and workmates.

Linkages: Links to people or groups further up or lower down the social ladder. The potential benefits of social capital can be seen by looking at social bonds. Friends and families can help us in lots of ways – emotionally, socially and economically. Linkages reaches out to unlike people in dissimilar situations, such as those who are entirely outside of the community, thus enabling members to leverage a far wider range of resources than are available in the community. (Woolcock 2001)

The Putnam team looked to whether social capital is *bonding* (or exclusive) and/or *bridging* (or inclusive). Putnam suggested that the former may be more inward looking and have a tendency to reinforce exclusive identities and homogeneous groups. The latter may be more outward-looking and encompass people across different social divides (Putnam 2000).

These were not seen as either-or categories to which social networks can neatly assigned but more-or-less dimensions along which we can compare different forms of social capital. However, Putnam did not really look at linking social capital nor did he come to grips with the implications of different forms of social capital i.e. that ‘different combinations of the three types of social capital will produce different outcomes (Field 2003).

2.1.5.4 Social Capital in Organizations

The idea of looking at social capital in firms and organizations was, as Cohen and Prusak (2001) said, relatively new. This may be because of the way in which the dominance of more mechanistic and system-oriented conceptions of organizational activity has masked their deeply social nature. A number of those concerned with organizational development, like Cohen and Prusak, have become increasingly suspicious of the people, processes, technology mantra, ceaselessly intoned as a summary of the sources of organizational effectiveness. There has, of course, been a significant embracing of the notion of human capital, but those writing about it rarely approach the social nature of organizations and often fall prey to a tendency to draw upon theories and metaphors that derive financial and physical notions of capital. The argument of those concerned with social capital is that when harnessed, it generates economic returns. More particularly, the benefits claimed by Smith (2009) include:

- ✓ Better knowledge sharing, due to established trust relationships, common frames of reference, and shared goals.
- ✓ Lower transaction costs, due to a high level of trust and a cooperative spirit (both within the organization and between the organization and its customers and partners).
- ✓ Low turnover rates, reducing severance costs and hiring and training expenses, avoiding discontinuities associated with frequent personnel changes, and maintaining valuable organizational knowledge.
- ✓ Greater coherence of action due to organizational stability and shared understanding. (Cohen and Prusak cited in Smith, 2009)

Given the relative infancy of the application of social capital to organizational life, there is little sustained or substantial research that can support attention to the notion within organizations. It certainly isn't *the* key to success, but it is part of the fabric of organizational life and the need to engage with it is, arguably, growing. The increasing complexity of organizations and the scale of informational activity; globalization; external and internal volatility; and what Cohen and Prusak (2001) call the challenge of virtuality (work carried out over a distance of time and space) all contribute here.

2.1.5 Concept of Financial Inclusion

Many definitions of financial inclusion have been suggested, based on characteristics that are symptomatic of broad access to financial services. Common elements of these definitions include “universal access” to a “wide range of financial services” at a “reasonable cost” (Bhaskar, 2013). To facilitate the discussion, we need to go beyond definitions to something that is easily quantifiable. This study considers a variety of measures. Let's look at individuals first. The primary focus is on the share of adults with access to the formal financial sector (Demirgüç-Kunt

and Klapper 2013). They evaluate access to a range of financial services, including owning an account, saving at a financial institution and borrowing from one.

Defining Financial inclusion (or, alternatively, financial exclusion) has been defined in the literature in the context of a larger issue of social inclusion (or exclusion) in a society. One of the early attempts by Leyshon and Thrift in Sarma (2010), defined financial exclusion as referring to those processes that serve to prevent certain social groups and individuals from gaining access to the formal financial system. According to Sinclair (2001), financial exclusion means the inability to access necessary financial services in an appropriate form. Exclusion can come about as a result of problems with access, conditions, prices, marketing or self-exclusion in response to negative experiences or perceptions. Carbo *et al.* (2005) defined financial exclusion as broadly the inability of some societal groups to access the financial system.

The Government of India's Committee on Financial in Sarma (2010) defined financial inclusion as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as the weaker sections and low income groups at an affordable cost (Rangarajan Committee cited in Sarma, (2010). Thus, most definitions indicate that financial exclusion is manifestation of a much broader issue of social exclusion of certain societal groups such as the poor and the disadvantaged. For the purpose of this paper, we define financial inclusion as a process that ensures the ease of access, availability and usage of the formal financial system for all members of an economy. This definition emphasizes several dimensions of financial inclusion, viz., accessibility, availability and usage of the financial system. These dimensions together build an inclusive financial system. As banks are the gateway to the most basic forms of financial services, banking inclusion/exclusion is often used as analogous to financial inclusion/exclusion. Definitions of financial inclusion have evolved from classifying individuals and enterprises according to a dichotomous division as either included or not, to viewing financial inclusion as multi-dimensional. With the aim of defining a more complete concept of inclusion, the Financial Inclusion Data Working Group of the Alliance for Financial Inclusion, cited in Triki, and Faye (2013) agreed on three main dimensions of financial inclusion that provide the underpinning for data collection: access, usage and quality.

Table 2.1: Dimensions of Financial Inclusion

1.	<i>Access</i>	Availability of formal, regulated financial services: Physical, proximity and Affordability
2.	<i>Usage</i>	Actual usage of financial services and products: Regularity; Frequency Duration of time used
3.	<i>Quality</i>	Products are well tailored to client needs Appropriate segmentation to develop products for all income levels

Source: Adapted from Alliance for Financial Inclusion Financial Inclusion Data Working Group (2011), cited in Triki and Faye (2013)

The adoption of broader and multidimensional definition of financial inclusion is crucial in the sense that it helps to move beyond the often erroneous assumption that inclusion will inevitably be achieved by simply offering enough access points. Instead, a more complete understanding of financial inclusion should speak on how frequently clients use products, if the products are effectively meeting their needs, and if they are better off as a result. Therefore, as depicted in table 1, defining and measuring usage and quality in addition to simple access would be very useful for analytical purposes. These three dimensions of financial inclusion are broad categories into which indicators can be grouped, without being restrictive. They simply provide a framework to guide policymakers in developing a sufficiently robust measurement strategy that reflects the multi-dimensional nature of financial inclusion. Within this framework, policymakers will still need to design a set of indicators appropriate to their needs and level of resources (Triki and Faye 2013).

Although efforts to promote financial inclusion should strive to improve all three dimensions simultaneously, when setting priorities for measurement, a number of countries are now gathering information sequentially, assessing access first, usage second, and examining quality third. This is often because in most countries, data on the level of service provision is more easily obtained than usage and quality data. In Africa, many countries are now at the level of collecting mostly access and some usage data. However, in countries where the financial scope surveys are carried out, usage and quality data may be more easily available than access data because of the surveys' focus on these dimensions.

2.1.5.1 Financial Inclusion Indicators

Financial inclusion is measured in three dimensions: (i) access to financial services; (ii) usage of financial services; and (iii) the quality of the products and the service delivery. Both supply-side and demand-side data is included to form a comprehensive view.

Countries are encouraged to collect their own data and supplement the indicators given in the data on areas of specific relevance to the country context. The data sources provide a useful starting point with which to populate the key indicators. The availability, sustainability and robustness of data were the key criteria, with appropriateness and comprehensiveness, in selecting the G20 (2016) Financial Inclusion Indicators. The data sources include the World Bank Global Findex database, IMF Financial Access Survey, Gallup World Poll, World Bank Enterprise Surveys, OECD National Financial Literacy and Financial Inclusion Surveys, OECD Financing SMEs and Entrepreneurs Scoreboard, World Bank Doing Business, World Bank Global Survey on Consumer Protection and Financial Literacy, World Bank Financial Capability Surveys, and World Bank Global Payments Systems Survey.

Although the scope of the G20 Financial Inclusion Indicators is comprehensive enough to provide a holistic assessment, new data collection efforts, as well as evolving technology and business models may well require additional or adapted indicators in the future.

According to Demircuc-Kuntand Klapper (2016), the core set of Global Findex indicators addresses five basic dimensions of the use of financial services on the individual level: accounts, savings, borrowing, payment patterns, and insurance. Usage of financial services refers to the levels and patterns of the use of various products used by different groups such as the poor, youth and women. Financial inclusion also refers to how easily individuals can access available financial services and products from formal institutions. Reliable and timely data on bank branch and ATM penetration is essential to the accurate measurement of financial inclusion. The demand-side data that the Global Findex provides will be an important complement to existing supply-side data collection efforts such as the IMF's Financial Access Survey and the Alliance for Financial Inclusion's Core Set of Financial Inclusion Indicators.

Demirguc-Kunt and Klapper (2016) selected core set of indicators and sub-indicators of financial inclusion based on the Global Findex database include:

Use of Bank Accounts

- Percentage of adults with an account at a formal financial institution (such as a bank, credit union, post office or microfinance institution [MFI])
- Purpose of accounts (personal or business)
- Frequency of transactions (deposits and withdrawals); percentage of adults with an active account at a formal financial institution
- Mode of access (such as ATM, bank branch, retail store or bank agent)

Savings

- Percentage of adults who saved within the past 12 months using a formal financial institution (such as a bank, credit union, post office or MFI)
- Percentage of adults who saved within the past 12 months using an informal savings club or a person outside the family
- Percentage of adults who otherwise saved (e.g., in their home) within the past 12 months

Borrowing

- Percentage of adults who borrowed within the past 12 months from a formal financial institution (such as a bank, credit union, post office or MFI) (flow measure)
- Percentage of adults who borrowed within the past 12 months from informal sources (including family and friends)
- Percentage of adults with an outstanding loan to purchase a home or an apartment (stock measure)

Payments

- Percentage of adults who used a formal account to receive wages or government payments within the past 12 months

- Percentage of adults who used a formal account to receive or send money to family members living elsewhere within the past 12 months
- Percentage of adults who used a mobile phone to pay bills or send or receive money within the past 12 months

Insurance

- Percentage of adults who personally purchased private health insurance
- Percentage of adults who work and personally paid for insurance premium

2.1.6 Collective Entrepreneurship Model in Cooperative Society

Collective Entrepreneurship has been of increasing interest to cooperative studies and social economy researchers as of late, especially given the lingering global economic crisis and the search for more robust, community-centered, and member-owned and controlled alternative organizational models (Birchall, 2012; McDonnell, Macknight, & Donnelly, 2012; Schoening, 2006; Spear, 2012, 2011; Zevi, Zanotti, Soulage, & Zelaia, 2011; Vieta, Tarhan, and Duguid, 2016). One reason for the turn to co-operatives among researchers is the evidence suggesting that the collective entrepreneurialism inherent to these types of democratically managed organizations undergird their resilience during market failure or difficult economic times, as well being particularly advantageous for meeting the needs of underserved entrepreneurs (McDonnell et al., 2012; Mook, Quarter, & Ryan, 2012; Novkovic, 2008; Spear, 2010;).

Researchers have been finding that collective entrepreneurship contributes to resilience in the cooperative movement as well (Johnson, 2000; MaRS, 2015; Novkovic, 2008). Collective entrepreneurship merges the collective risk-taking and resource pooling of collective entrepreneurship with the organizational form of cooperatives, which, Vieta, Tarhan, and Duguid, (2016) argue, further catalyzes and guides the type of entrepreneurship that occurs through them. Moreover, the emergent theory of collective entrepreneurship itself draws on and contributes to the still-nascent intersection of collective entrepreneurship and social movement research (Cooney, 2012; Craig, 1993; Develtere, 1994, 1996; Diamantopolous, 2012; Spear, 2010).

Entrepreneurship is considered important for economic development, Not much scholarly attention has been given to the issue of entrepreneurship in jointly-owned firms, such as in cooperatives. Entrepreneurship in these types of firms may be called collective entrepreneurship because a jointly-owned firm entrepreneurship may be located at the level of the multiple joint-owners and at the level of the jointly-owned firm (Jos&Bart 2015).

Jos & Bart, (2015) has been one of the researchersto relate the concept of collective entrepreneurship to the cooperative society. Theyconsidered collective entrepreneurship as a new phenomenon for cooperatives and defined it as “a form of rent-seeking behavior exhibited by formal groups of individual cooperative members that combine the institutional frameworks of investor-driven shareholder firms and patron-driven forms of collective action (Jos&Bart 2015). In other words, Cook and Plunkett explore the emergence of jointly-owned firms where entrepreneurial activity takes place at different levels of the organization, notably at the level of the individual member-owners and at the level of the jointly-owned firm. Their paper places the interaction between complex organizational structures and the concept of entrepreneurship on the academic agenda.

However, the paper does not explore the extent to which jointly-owned, multi-level organizations affect the performance of entrepreneurship; neither does the paper explain what impact these different loci of entrepreneurship have on the coherence and therefore manageability of the organization. Scholars of theory and practice of cooperatives have claimed that many of these organizations are restructuring towards more “entrepreneurial” organizational model.

Nilsson,cited in Jos&Bart (2015) presents a typology of cooperative models, making a distinction between the traditional cooperative model and a group of four so-called entrepreneurial models. The latter are different from the traditional model (and from each other) in the financial structure they use to attract additional equity capital. Nilsson has named these new structures entrepreneurial models, because when cooperatives seek to become (more) entrepreneurial they need additional risk capital, which they obtain by implementing an innovative financial structure.

Entrepreneurship in a cooperative can reside with the members with the managers of the cooperative society, or with both. What are the implications for the efficiency of the organization of placing entrepreneurship at one or the other level in the organization? Traditionally, cooperatives have been established on the basis of the principle that the members are individual and independent entrepreneurs who collectively decide on the activities of the cooperative society. The latter has always been treated as a dependent firm (Bonus, cited in Jos&Bart 2015), that mainly carries out what the members, through the Board of Directors, have decided. Similarly, Van Dijk, cited in Jos&Bart (2015) posits that the double-layer organizational form entails also a two-layer system of entrepreneurship. He then argues that when market conditions for cooperatives change, the lead in entrepreneurial activities should shift from the member of the cooperative to the collective firm, or even to the subsidiaries of the collective firm.

The co-operative movement is historically rich and diverse, taking root in the last half of the 19th century as a central organizational tool for the development of agriculture and rural communities, an alternative banking system via credit unions, affordable insurance, consumer provisioning, and later on in the 20th century, worker co-operatives (MacPherson, 2009; Vaillancourt, 2009). Concept of cooperative entrepreneurship forms a sub-set of the broader concepts of social or collective enterprise and entrepreneurship. Social economy researchers have adopted different terms and definitions when referring to and analyzing business activities with socially-driven values, objectives, and entrepreneurialism, variably termed as “social enterprises” (Borzaga & Defourny, 2001; Defourny & Nyssens, 2012; Galera & Borzaga, 2009; Kerlin, 2009; Mair & Martí, 2006); “social economy businesses” (Mook *etal*, 2012), “benefit corporations” and numerous other terms. What brings together these forms of social businesses are strong social missions and objectives supported in part by market activity and in part by other sources of supports, such as grants, government funding, donations, membership fees, or voluntary labour. But conceptual definitions of these types of firms, on the whole, vary, are still contested, and depend on the historical trajectory, the preponderance and degrees of welfare state or market-driven economic paradigms, and the legislative domains within national contexts.

Most broadly, two main enterprise conceptual camps have emerged, namely the U.S. school and the European school. Often falling within what is termed “the third sector” or “civil society” (rather than the “social economy”), the U.S. school considers all innovative activities with a social purpose as socially entrepreneurial, without being too concerned with their ownership and management models; for instance, corporate social responsibility efforts are also considered to be social entrepreneurial activities (Ackerman, 1997; Bornstein, 2004; Dees, 1998). On the contrary, the European school argues that social/collective entrepreneurial activities derive from citizen-led initiatives with an explicit aim to benefit their community, and thus must involve decision-making processes that are participatory and not based on capital ownership (Borzaga & Defourny, 2001; Defourny & Nyssens, 2012). Autonomy, participatory processes, and limited profit distribution are central for the European school (Defourny & Nyssens, 2012;; Spear, 2012). The Canadian approach to social enterprise and social/collective entrepreneurship tends to fall in between these two conceptual approaches, taking into account also the external supports that these enterprises and entrepreneurs rely on (Elson & Hall, 2012 ; McMurtry *et al.*, 2015). Quarter, Mook, & Armstrong (2009) provide an illustrative Canadian definition of social enterprise:

A social enterprise is a form of community economic development in which an organization exchanges services and good in the market as a means to realizing its social objectives or mission. In this sense, it is similar to a conventional business, but it also requires external support in order to be sustainable and is established primarily to meet social purpose. In the Canadian model, community economic development organizations, some non-profits, and many co-operatives that are primarily social in focus can be social enterprises. As with other Canadian scholars (Quarter *et al.*, 2009; McMurtry *et al.*, 2015), we agree on the whole with the European school that the collective ownership and management structures of social enterprises are decisive in generating and sustaining their economic, social, and even environmental impacts (the so-called “triple bottom line”). As a result, studies that adopt the “heroic individual” approach of the US model will not be the subject of further analysis here (nor did we find much evidence of this in the new Canadian co-operatives we researched). Instead, our emerging concept of co-operative entrepreneurship, better reflecting the Canadian experience with cooperatives’ role in

Community Economic Development (CED), is grounded in the motivations, processes, and outcomes of collective entrepreneurship (which we found plenty of evidence for in our sample).

A social movement theory of cooperative entrepreneurship social/collective entrepreneurship closely intersects with and often emerges from social movements. Cooperatives, for instance, are one type of social business that have been understood as emerging from the organizational needs of collective actions to achieve social change (Borzaga & Fazzi, 2014; Craig, 1993; Develtere, 1994, 1996; Diamantopolous, 2012; McPherson, 2009; Spear, 2010). But social movement theory and, in particular, theories of social movement organizations has only recently been tapped for explaining the emergence and organizational structures of co-operatives and social enterprises (Cooney, 2012; Spear, 2010).

Spear (2010) argues that ‘social movements in civil society are closely linked to social entrepreneurial activity’ Social enterprises, for Spear, have conceptual and practical connections to social movement organizations; both, after all, emerge from collective action to overcome inequalities and socio-economic gaps and aim to deliver on social objectives. Spear also develops the entrepreneurial connections between social enterprise and social movements within a threefold conceptual taxonomy: (1) social entrepreneurs might themselves be deeply involved in a social movement (“insider social entrepreneurialism”), (2) inspired by social movements (“outsider social entrepreneurialism”), or (3) social entrepreneurial activities might themselves inspire new social movements to emerge. Spear then goes on to develop a social movement theory of social entrepreneurship grounded in ideological development and framing (shared meanings and identity formations) and resource mobilization (the people, expertise and information, financial resources, and legitimacy needed for social organization). Importantly, network formation and development form an integral part of Spear’s typology that further details the interconnections between social entrepreneurship and social movements.

Based on his study of six European co-operatives, Spear (2008) also argues that cooperatives society mobilize resources through ‘distributed entrepreneurship’, a term he coined in order to refer to ‘circles of entrepreneurial activity’. Circles of entrepreneurship connect ‘the central roles played by the entrepreneurs within the organization’ but link them intimately with wider

groups (or circles) of ‘external stakeholders sometimes quite closely and essentially involved’. Spear notes that external support within the various overlapping circles of distributed entrepreneurship is provided in two forms: (1) formally through institutional support structures (i.e. local development agencies, supporting NGOs, etc.); and (2) informally through social capital (i.e. political support, expertise, assistance, contacts, advice by various factors including but not limited to landlords, customers, advisors, family, other businesses, etc.).

Montgomery & Dacin (2010) argue that gestures to social movement organizations’ initiatives that develop and operate with the participation of members possessing intersecting yet diverse cultural, social and economic backgrounds, viewpoints, and interests. The result is a multiplicity of lenses and voices that, depending on how they are managed, could either support or hinder an initiative’s resource mobilization efforts and members’ learning processes. Within this tension that is a reality for many social movement and also social mission-driven enterprises, as we will show later on, multi-vocality refers to the organizational capacity to ‘combine...numerous voices as well as to speak to stakeholders in an accessible manner and straddle [multiple] audiences’

Collective entrepreneurship is a phenomenon typically present in cooperative societies. Not only are the assets of the cooperative owned by a group of entrepreneurs, formally associated in the cooperative society, also the traditional organizational feature of bottom-up decision-making makes the cooperative an example of true entrepreneurship. However, cooperatives have experienced a number restructuring processes of the last decade, which affect extent of entrepreneurship in the organization(Jos&Bart,2015).

First, cooperatives have become larger and more international, making it more difficult for the cooperative to really engage (all) members in the decision-making process. The larger the cooperative, the more layers of representation there will be between the individual member and the Board of Directors. Large cooperatives increasingly mimic the corporate governance structure of Plc’s. This, eventually, will lead to lower entrepreneurship in the cooperative as the managers of the cooperative will either avoid making risky investments or will increasingly pursue their own interests(Jos&Bart,2015).

Second, cooperatives have become more market-oriented, increasing their effort in responding to customer demands. This, at instances, has led to a shift from producer orientation towards customer orientation. As customer orientation requires knowledge and skills of marketing, the judgment of the (marketing) managers becomes relatively more important than the judgment of the MFs. If this shift in strategic orientation means that owners and managers no longer jointly decide on future projects, it also entails a loss of entrepreneurship(Jos&Bart,2015).

Third, cooperatives have developed hybrid ownership structure in order to be able to attract additional equity capital. Inviting non-members to become owners could lead to a loss of entrepreneurship when these new owners have different interests than the members. Having diverging interests among the owners will either lead to laborious decision-making or it will lead to managers taking advantage of the situation by pursuing their own interests. However, when the new owners if allowed by the membership - take an active stand in the decision-making process (similar to that of activist shareholders in Plc's) the extent of entrepreneurship may be increased(Jos&Bart,2015).

Finally, the current trend of establishing many new small cooperatives, either outside of even within existing cooperatives, leads to an increase in entrepreneurship. In small cooperatives, members have a direct line with the managers, often discussing not only strategic but even operational decisions. Commitment of the members is high, leading to strong involvement in the decision-making process. Investment decisions are the outcome of judgment of both owners and managers(Jos&Bart,2015).

According to Cook *et al.* (2008), referring to the definition of collective entrepreneurship in order to describe innovative forms of cooperative society, a collective enterprise “is the process by which investors, customers or suppliers, plan, finance and establish a business form of collective action, which aims to win profits by more than one chain of production and marketing of goods and services. This format is a historical trend of previous collective schemes”. This definition explains alternative collective enterprises, which emerged through the efforts of people with long experience in organizing traditional cooperative society.

According to Panagiota&Nastis(2011), alternative forms of cooperative or collective entrepreneurship are separated into two major categories depending on the source of capital. Where capital comes only from the members, we have, in addition to traditional cooperatives (TC), New Generation Cooperatives (NGC). Other types of cooperatives where the capital comes only from members are co-investments with members (membership as a raw material supplier or purchaser of the product of a cooperative is less important) and cooperatives in which the investment of each member is proportional to the amount of transactions they execute with the cooperative. Where capital comes from members and interested parties, we have cooperative societies, cooperatives, preferred shares and finally, limited companies (Chaddad & Cook, 2004). Patron-Owned organizations have also been suggested as an example of collective entrepreneurship. Discussion of the cooperative as a collective entrepreneur dates at least back to Emelianoff cited in Burness & Cook (2009) whose work on the theory of cooperation discusses the fundamental characteristics of collective enterprise. As Emelianoff seeks to define a cooperative and the collective entrepreneur he comes across a problem familiar to those attempting to define collective entrepreneurship: a fundamental lack of clarity with respect to key concepts. Some terms necessary in examination of the cooperative problem have no definite connotations in current usage, whereas others are applied to two or more dissimilar concepts and different authors use the same term with various and very often with varying meanings. Wide variance in the meanings attached to the single term cooperativemay have led to what Emelianoff describes as literature full of legends and false evaluations. Emelianoff suggests the concept of a collective entrepreneur would involve 1) an income-generating organization governed by a plurality of stockholders that 2) assigns voting rights in proportion to stockholdings and 3) distributes residual income in proportion to stockholdings.

Under this framework, traditional cooperatives that operate on a democratic basis would not be seen as a collective enterprise. In addition, distribution of savings or surplus distributed in proportion to use would not constitute a collective enterprise. Finally, to claim that a cooperative was also a collective enterprise, Emelianoff suggests the cooperative must generate entrepreneurial income. For example, cash surplus generated by underpayment in marketing associations or overcharges in purchasing associations is not seen as income generation according to Emelianoff's definition. Emelianoff's view of collective entrepreneurship represents

a stark contrast to definitions of collective entrepreneurship presented in following sections of this work that hinge on democratic governance and the subordination of the profit motive to social concerns. Neither is his definition shared by authors who choose to utilize the term collective entrepreneurship in a general sense for the wide variety of activities and organizations associated with cooperatives. However, recent work in the area patron or producer-owned cooperatives has returned to this fundamental discussion, and attempts to distinguish potential differences between collaborative, cooperative and collective entrepreneurship (Iliopoulos, 2007).

Mourdoukoutas, cited in Burness & Cook, (2009) describes collective entrepreneurship as a fluid organizational structure that affords the opportunity to the hundreds or even thousands of hidden entrepreneurs scattered among suppliers, distributors, customers, and collaborators to come forward with the information they possess and to join forces for the discovery and the exploitation of new business opportunities (Mourdoukoutas, 1999). From this starting point, Mourdoukoutas includes what he labels internal and external (i.e. intra-firm and inter-firm) collective entrepreneurship in his study of the development of entrepreneurial networks.

2.1.7 Conceptual Framework (Schema)

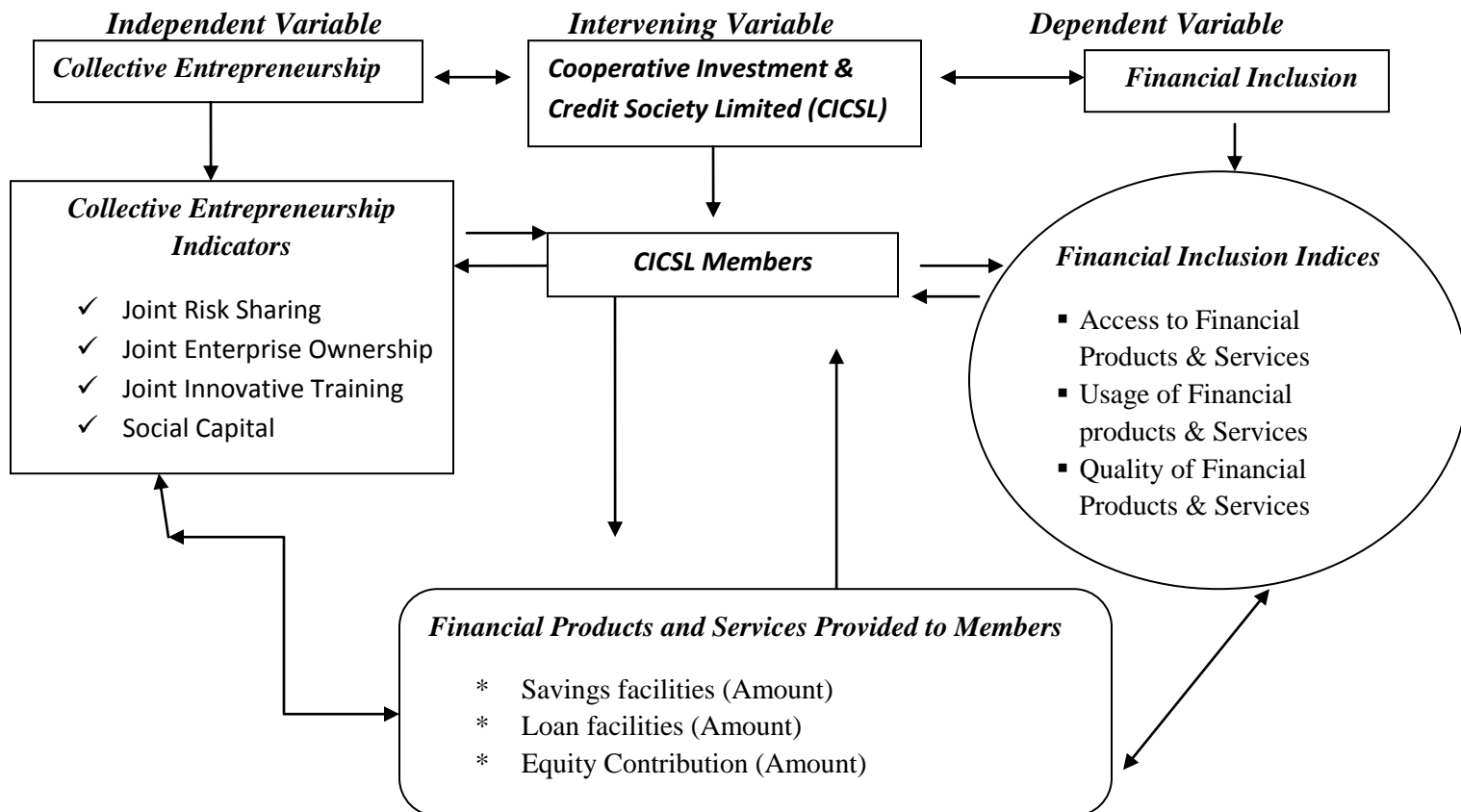


Figure 2: Relationship between study variables

Source:Taiwo, 2017

The above conceptual framework depicts the relationship between study variables. Collective entrepreneurship represent *independent* variable which influences financial inclusion (*dependent* variable) through the cooperative investment and credit society limited (*intervening* variable). Collective Entrepreneurship indicated that CICSL members collectively shared risk accrued from the jointly-owned enterprise and investment; also the members collectively benefit from the innovative training. Collective entrepreneurship facilitates access; usage and quality of saving and loan facilities, as well as equity contribution which are the conventional indicators for financial inclusion.

2.2 Empirical Review

Collective Entrepreneurship (CE) is the ability of several individuals to jointly innovate and create within organizations. In the exploratory study of Franco and Haase (2016) on Collective entrepreneurship and Employees' perceptions of the influence of leadership styles, The units of analysis were staff members of a Portuguese group of small- and medium-sized enterprises (SMEs). A total of 204 questionnaires were returned, representing almost half the employee population they approached. For measurement, they employed 19 items to gather the six latent variables related to our model. For data analysis, they used partial least squares. Their results found that participative leadership style had the highest joint and indirect effect on more effective CE. Job satisfaction appears to be an important moderator for the occurrence of CE. Their study contributes to advancing knowledge in the fields of organizational psychology and entrepreneurship. They combine and extend previous research, which allows them to reconcile the sometimes contradictory findings so far concerning leadership and CE in the realm of small- and medium-sized enterprises.

Cámara and Tuesta (2014) measured Financial Inclusion from Multidimensional Index and presented the estimated financial inclusion indices for 82 developed and less-developed countries by two-stage PCA for the year 2011. The correlation matrix for the causal variables used to measure financial inclusion is reported, as they computed the weights for the causal variables for each sub-index and estimate the latent variables: usage, barriers and access that represent the dimensions of financial inclusion. They constructed the sub-indices as weighted averages of the principal components; it is possible to gather the coefficients for each causal variable. With regard to the weighting scheme, for the usage dimension, the indicator for loans has the highest weight (0.42), followed by having an account and savings, at 0.30 and 0.28 respectively. Result further showed, in a cumulative way and by dimensions, the amount of the total variance explained by the different components

Ogbo & Agu (2012) analyzed the contributions of entrepreneurship in the economic development through SME development in Nigeria. A total of 100 SMEs were randomly selected from a cross section of a population of all SMEs spread around some States of Nigeria and covering virtually all forms of enterprise. Participants were selected through a simple random sampling. The

responses to the questionnaires were complemented with personal interviews of some SMEs operators. The responses of the participants were analyzed using the Statistical Package for Social Sciences (SPSS), which generated the frequency distributions, means, standard deviations, chi-square statistics, analyses of variance, etc of the responses. The hypotheses of their research which were tested at 0.05 level of significance using chi-square statistics hinged on identifying the greatest problem which SMEs face in Nigeria, the identification and ranking of the top ten problems or challenges of SMEs in Nigeria and the relationship between the form and nature of the business enterprise and its sources of funding for its operations. The major findings of their study include the following: SMEs have played and continue to play significant roles in the growth, development and industrialization of many economies the world over. In the case of Nigeria, SMEs have performed below expectation due to a combination of problems which range from attitude and habits of SMEs themselves through environmental related factors, instability of governments and frequent government policy changes etc. Promoters of SMEs should thus ensure the availability or possession of managerial capacity and acumen before pursuing financial resources for the development of the respective enterprise

Makongoso; Gichira, and Orwa,(2015) studied Governance on the growth of Collective Entrepreneurship in Agriculture sector in Kenya.They believed that Cooperatives, as member-owned and controlled enterprises play an important role in upgrading socio-economic status of members. However, they experience a myriad of hitches including mismanagement, financial scandals and inadequate innovation raising questions about quality of governance. The concern is legitimacy of Boards, scanty expertise and effectiveness of managers in supervising and protecting members. They are practical example of collective entrepreneurship but pay little attention to entrepreneurship and seldom enhance their business dimensions through it for competitiveness. According to Makongoso; Gichira, and Orwa,(2015)their study was borne out of inadequate research on the effects of governance on the collective entrepreneurship in agriculture sector. Their study, therefore, sought to investigate the effect of governance on the growth of collective entrepreneurship in the agriculture sector. The study adopted descriptive research where multistage sampling technique and questionnaire was used to collect data from selected respondents in the coffee cooperatives in Kenya. Data were analysed using multiple regression. It was found that financial management systems positively influence the growth of collective entrepreneurship and policy strongly mediates relationship between them.

Vieta, Tarhan, and Duguid.(2016) did a study on Collective to Co-operative Entrepreneurship in Canada's New Co-operatives. The co-operatives represented in their survey sample, interview sample, and focus groups were mostly small- and medium-sized firms (SMEs). Based on membership numbers, almost half of their survey sample (46%) was made up of small co-ops (less than 100 members), while a third were medium-sized (100-500 members) and 21% large (over 500 members). Key informants from their focus group and interview samples also followed a similar membership-based size breakdown. Their research also relied on 27 in-depth interviews of new co-operatives from across Canada carried out throughout the first half of 2013. A purposive and illustrative sampling rationale was used.

The three authors of this article began coding by using starter codes, which were developed collectively based on the research questions and an initial literature review. Subsequently, recurrent themes were identified using open coding (Corbin & Strauss, 2008). The identification of recurrent themes led to the definition of firstorder codes and the categorization of these codes into conceptual themes. First-order coding revealed that a significant group of Canada's new co-operatives were influenced by and connected to various social movements and demonstrated similarities with them in their development. This realization encouraged the authors to re-categorize the codes and to undertake a second-order open coding which eventually lead to the sub-themes of motivations, processes, and outcomes, and how the co-operative model facilitates the resource mobilization, democratic governance, and educative and learning needs and desires of collective entrepreneurs. Finally, researchers performed axial coding (Corbin & Strauss, 2008) in order to explore relationships between concepts and categories, where they arrived at the overarching and interconnected theoretical dimensions of (1) framing and ideological formation, (2) distributed entrepreneurship, and (3) multi-vocality.

Aina & Oluyombo (2014) did a study on the economy of financial inclusion in Nigeria: Theory, Practice and Policy. Their study investigated through the use of questionnaire, the extent to which adults in Nigeria participate in financial inclusion measures as access to and use of bank accounts, mobile money and insurance services. The benefits and barriers to the use of these services were also identified. They found that though access to bank accounts is high, a majority of the respondents operate savings accounts. However, bank account ownership penetration ratio

of 1.4 accounts to an adult including inactive accounts is very low. The use of bank accounts in receiving money from, and sending money to family members living far away helps to service and maintain good family bond typical of Africans where family ties are held in high esteem. Most adults use their accounts between one and five times in a month but 24.01% of the accounts are inactive in receiving deposits while 6.91% are inactive for withdrawal in a month. The most popular non-cash payment methods are ATM/Debit card and wire transfer/on-line payment. 59.58% of those who save used a bank account, 32.5% save with cooperative societies, while 26.25% used daily contributors and rotational savings scheme. The use of mobile money and insurance services is very small among account holders. The highest self-reported barrier to the use of bank account is lack of necessary documents. Account opening conditions and documentations need to be reduced, while the KYC requirements should be tailored to take care of the realities in some areas. Increase in public enlightenment campaigns is required to low income earners, emphasizing the benefits of financial inclusion to everybody using different languages, rather than just the middle class and the elite as it is currently done. There is need for stable electricity supply to drive the infrastructural facilities provided by banks, telecommunication companies and other related service providers such that fluctuation in internet and other network communication is reduced to the barest minimum if not fully eliminated, this also include ATMs and point of sales terminals.

Onaolapo & Odetayo (2012) did a study on Financial Inclusion as tools for survival in globally competitive environment an experience from Nigerian. They used micro finance banks approach as one of those diverse ways is through their inclusion strategies. Access to finance, especially by the poor and vulnerable groups, is a prerequisite for employment, poverty reduction and social cohesion. Furthermore, access to finance will empower the vulnerable groups by giving them opportunity to have bank accounts, save and invest. The main objective of their research paper examined causes of financial exclusion in Nigeria and to identify financial inclusion strategies that Microfinance banks could employ in order to survive in a global competitive environment. Personal interview was used to collect data from all microfinance bank managers in Osun State, Nigeria. Their research paper identified causes of financial exclusion in Nigeria. Recommendations were made on financial inclusion strategies micro finance banks can employ to enhance savings in rural areas and survive in a globally

competitive environment. The result implied that for microfinance banks in Nigeria to achieve its stated objectives and compete with her peers globally; financial inclusion strategies must be employed.

Chagwiza; Muradian, Ruben, & Tessema, (2011) Compared collective entrepreneurship between two Producer Organizations in the Ethiopian Honey Sector. Their paper focused on the comparison of 2 honey producers' enterprises in Masha district, Ethiopia. They argued that the collective entrepreneurial capacity of collective producer groups may vary depending on the form of organizations involved (cooperatives and private limited companies (PLCs)). The producer enterprises considered are operating in the same area; they both received training on honey production and quality management provided by SNV and most importantly, are both suppliers of a lead firm, honey processing company and exporter to the European Union. By comparing the groups across a number of variables, their results show that as compared to cooperatives, PLCs have succeeded in their economic performance, concerted upgrading and integration into the value chains. Their findings are consistent with collective action theory, which claims that the likelihood of collective action is higher in small user groups. Additionally, the PLCs have managed to establish good relations with the processor which can be seen in the value chain financing. Their paper further suggested that engaging the private players like processors is pivotal in facilitating innovativeness and entrepreneurship among producers, rural development and socio-economic betterment of smallholder producers.

In an attempt to answer the question on maintaining and empowering entrepreneurial capability by focusing on the understanding of collective entrepreneurship as the development of individual entrepreneurship (traditional entrepreneurship) Lindawati, (2014) studied collective entrepreneurship model as an alternative in empowering Micro, Small and Medium Enterprise (MSME) is. The study used concurrent triangulation approach as a research method. It is a strategy employing mixed approach between quantitative and qualitative applied side by side or with the same time (within a span of time). The representative sampling is using purposive sampling of MSMEs and MSME Cooperatives in Malang the population in this study was all entrepreneurs in formal MSMEs registered in the office of Cooperatives and MSMEs in the area of Malang (regency and city). The samples in the study are the entrepreneurs of MSMEs in

Malang City with a total of 150 MSMEs in 2012 and 10 Cooperative Units, consisting of 5 cooperative units engaged in saving and loan activities and 5 cooperative units engaged in buying and selling of consumer goods. Total respondents, including MSMEs and Cooperative Unit, are 155 respondents. The sampling used is purposive sampling with the aim to obtain unbiased data and can represent the population. Population and sample data are obtained from the Department of Cooperatives and Small and Medium Enterprises and the Department of Industry - Malang. The approach in the acquisition of data is using triangulation method. Structural Equation Modeling (SEM) method is implemented as an analysis model of quantitative approach that uses value to answer the research problems and to achieve the objectives of this research. The results show that the existence and the empowerment of MSMEs and Cooperatives are triggered by the aspects of psychology and the ability of the individual that become the internal aspects and institutional structure factor (external aspect) has a positive association with the performance of MSMEs and cooperatives.

Makongoso (2016) investigated the effect of governance on the growth of collective entrepreneurship in the Agricultural Sector in Kenya with evidence from the Coffee Sector in Kenya. The general objective of his study was to investigate the effects of governance on the growth of collective entrepreneurship in the Agricultural Sector in Kenya. The study used a descriptive research where the population was all Agricultural Sector in Kenya championing coffee. The sample frame was a list obtained from the Kenya National Bureau of Statistics. The accessible population was 202 entrepreneur Coffee co-operatives. By a multi-stage sampling, 137 coffee cooperatives in Kenya was the sample size. A questionnaire was the instrument for data collection. The secondary data was from existing reports, publications and the internet. Both qualitative and quantitative analysis was done using SPSS version 21 and Analysis of Moment Structures (AMOS) as an add-on module as a tool for analysis. The study established that financial management systems, organization demography and Human Resource Management positively influence the growth of collective entrepreneurship. The influence increases more whenever policy was introduced as a moderator. The study concluded that Agricultural Sector in Kenya did not have appropriate functional financial management systems to ensure consistent sound business practices and principles. The management committee members and their top management were rated moderately low in designing and diffusion of technologies. Majority did

not have innovative products to sustain positions in the market. The key aspects of organization demography such as size, age and managerial tenure distribution had a significant bearing and affected the growth of collective entrepreneurship in the sector. The human resource had not adequately developed and maintained competencies to acquire competitive position in the evolving market. Majority had inadequate skills or capacities required to embrace new ideas, change, innovation and teamwork where majority had not employed the right people.

2.3 Theoretical Review

Kerlinger (1973) defines a theory as a set of interrelated constructs (concepts), definitions, and propositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting the phenomena. The researcher adopted three theories for the study. The adopted theories are; theory of collective action; entrepreneurship theory and theory of inclusion.

2.3.1 Theory of Collective Action

Collective action theory was propounded by Mancur Olson in 1967. Collective action occurs when more than one individual is required to contribute to an effort in order to achieve an outcome. Olson central argument is that concentrated minor interests will be overrepresented and diffuse majority interests trumped, due to a free-rider problem that is stronger when a group becomes larger. He further argues, instead that individuals in any group attempting collective action will have incentives to "free ride" on the efforts of others if the group is working to provide public goods. Individuals will not "free ride" in groups that provide benefits only to active participants.

Pure public goods are goods that are non-excludable (i.e. one person cannot reasonably prevent another from consuming the good) and non-rivalrous (one person's consumption of the good does not affect another's, nor vice versa). Hence, without selective incentives to motivate participation, collective action is unlikely to occur even when large groups of people with common interests exist.

Olson noted that large groups will face relatively high costs when attempting to organize for collective action, while small groups will face relatively low costs, and individuals in large

groups will gain less per capita of successful collective action. Hence, in the absence of selective incentives, the incentive for group action diminishes as group size increases, so that large groups are less able to act in their common interest than small ones.

2.3.2 Theory of Entrepreneurship

There are so many theories of entrepreneurship which are based on psychological/personality traits, sociological models and socio-economic factors influencing the success of businesses enterprise.

2.3.2.1 Economic Based Theory of Entrepreneurship: Economic entrepreneurship theories date back to the first half of the 1700s with the work of Richard Cantillon, who introduced the idea of entrepreneurs as risk takers. The classic, neoclassical and Austrian Market process schools of thought all pose explanations for entrepreneurship that focus, for the most part, on economic conditions and the opportunities they create.

2.3.2.2 Resource-Based Theory of Entrepreneurship: Resource-based theory focus on the way individuals leverage different types of resources to get entrepreneurial efforts off the ground. Access to capital improves the chances of getting a new venture off the ground, but entrepreneurs often start ventures with little ready capital. Other types of resources entrepreneurs might leverage include social networks (e.g cooperative society) and the information they provide, as well as human resources, such as education. In some cases, the intangible elements of leadership the entrepreneur adds to the mix operate as resource that a business cannot replace.

2.3.2.3 Psychological Theory of Entrepreneurship: Psychological theories of entrepreneurship focus on the individual and the mental or emotional elements that drive entrepreneurial individuals. A theory put forward by psychologist David McClelland, a Harvard emeritus professor, offers that entrepreneurs possess a need for achievement that drives their activity. Julian Rotter, put forward a locus of control theory. Rotter's theory holds that people with a strong internal locus of control believe their actions can influence the external world and research suggests most entrepreneurs possess trait. A final approach, suggests personality traits ranging from creativity and resilience to optimism drive entrepreneurial behavior.

2.3.2.4 Sociological/Anthropological Theory of Entrepreneurship: The sociological theory centers its explanation for entrepreneurship on the various social contexts that enable the opportunities entrepreneurs leverage. Paul D. Reynolds, a George Washington University research professor, singles out four such contexts: social networks, a desire for a meaningful life, ethnic identification and social-political environment factors. The anthropological model approaches the question of entrepreneurship by placing it within the context of culture and examining how cultural forces, such as social attitudes, shape both the perception of entrepreneurship and the behaviors of entrepreneurs.

2.3.2.5 Opportunity-Based Theory of Entrepreneurship: Peter Drucker put forward an opportunity-based theory. Drucker contends that entrepreneurs excel at seeing and taking advantage of possibilities created by social, technological and cultural changes.

Entrepreneurship theory suggests that entrepreneurial behavior is a function of the individual's interaction with the society. The entrepreneurial function implies the discovery, assessment and exploitation of opportunities, in other words, new products, services or production processes; new strategies and organizational forms and new markets for products and inputs that did not previously exist (Shane & Venkataraman, 2000). The entrepreneurial opportunity is an unexpected and as yet unvalued economic opportunity. Entrepreneurial opportunities exist because different agents have differing ideas on the relative value of resources or when resources are turned from inputs into outputs. The theory of the entrepreneur focuses on the heterogeneity of beliefs about the value of resources.

2.3.3 Theory of Financial Inclusion

Access to formal financial services has the potential to help transform the lives of low-income households through three channels: the smoothing of consumption, investment in human or productive capital and the management of vulnerabilities. Theory of inclusion is to give people with special needs equal opportunities to participate fully in regular financial activities with people who do not have any special needs.

According to Gardeva & Rhyne (2011) financial inclusion or broad access to financial services is as an absence of price and non-price barriers in the use of financial services. The theory of financial inclusion emphasized that financial services and products should be accessible to all: this is often seen as the goal of financial inclusion.

2.3.4 Tenets of the Theories

Olson's theory of Collective Action Tenets was that;

1. if everyone in a group (of any size) has interests in common, then they will act collectively to achieve them; and
2. The majority will tyrannize and exploit the minority.

Tenets for entrepreneurship theory was that

- ✓ Needs for achievement and power through innovations and creativity
- ✓ Locus of control
- ✓ Risk taking propensity

Tenets for financial inclusion theory emphasized on the

- access to financial services and products for everybody that were excluded financially
- Usage of financial services and products for everybody that were excluded financially
- Quality of financial services and products that were available to those people that were excluded financially

2.3.5 Premise for the Adoption of the Theories

It is obvious from the facts presented in the theories adopted for the study that, at least where economic objectives are involved, that groups of individuals (like cooperative society) with common interests usually attempt to further those common interests. Cooperative with common interests is expected to act on behalf of their common interests much as single individuals are often expected to act on behalf of their personal interests through entrepreneurship. The theory of collective action; entrepreneurship theories; and theory of financial inclusion are all embedded in the concept of collective entrepreneurship which is about collective innovative training; collective ownership of enterprise that involved risk sharing which is capable of facilitating and

enhancing access; usage and quality of financial services and products among the cooperative members. Many economists of diverse methodological and ideological traditions have implicitly or explicitly accepted it.

The idea that groups tend to act in support of their group interests is supposed to follow logically from this widely accepted premise of collective entrepreneurship model. In other words, if the members of cooperative investment and credit society limited (CICSL) have a common interest or objective, and if they would all be better off if they were financially included, it has been thought to follow logically that the individuals in that group would financially include, if they were rational and self-interested, act to achieve that objective. These theories contended that there is linear relationship between collective action; entrepreneurship and financial inclusion.

2.4 Summary and Gap in the Literature

There are numerous studies conducted by various researchers and scholars from various backgrounds of management sciences, social science and other related field of study. These existing and related literatures were review based on the identified variables in the study and majority of these studies reviewed highly concentrate their study on relationship and influence of entrepreneurship on both micro and macroeconomic indices like income; employment; development etc; . Similarly, collective entrepreneurship and financial inclusion were extensively reviewed but surprisingly, the concept collective entrepreneurship and financial inclusion were separately studied by various researchers without any meaningful attempt to link the two concepts together that is, to ascertain the nature and extent of collective entrepreneurship on financial inclusion. Based on the identified gap, vacuum was created by these researchers through their failure to establish a link between the collective entrepreneurship and financial inclusion especially among members of cooperatives investment and credit cooperative society in Osun State.

This present study is focused to close this gap. As the researcher is determined to establish link between the collective entrepreneurship and financial inclusion which Cooperative Investment And Credit Societies Limited in Osun State was used as the case study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This study made use of descriptive(*Ex post facto*) research which includes survey and fact finding enquiry about the effects of collective entrepreneurship on financial inclusion among

members of cooperative investment and credit societies limited in Osun State. The ex post facto research was adopted by the researcher because it describes the state of affairs as it exists at present and enables the use of questionnaire in eliciting information from the respondents. The ex post facto is most appropriate type of research for this study because it does not allow the researcher to have control over the study variables. The researcher can only report what has happened or what is happening. According to Kothari (2011), Ex post facto studies also include attempts by researchers to discover causes even when they cannot control the variables of their study.

3.2 Area of Study

The study area was Osun State which is one of the 36 States of the Federation. Osun State was created on August 27th 1991, when the administration of Gen Ibrahim Badamosi Babangida created nine States with Osun created out of Oyo State with Osogbo as the capital. Osun state shares its boundary with Kwara State in North; Oyo State in the West; Ekiti in East and Ondo State in the South. The major ethnic group in Osun State is Yoruba with sub-ethnic groups such as Ife, Ijesha, Oyo, Ibolu and Igbomina and there are also people from other parts of Nigeria. Yoruba and English are widely spoken in the State. The people of Osun State practice islam, christianity and paganism.

The State consists of thirty Local Government Areas namely: Aiyedaade, Aiyedire, Atakunmosa east, Atakunmosa west, Boluwaduro, Boriipe, Ede north, Ede south, Egbedore, Ejigbo, Ife central, Ife east, Ife north, Ife south, Ifedayo, Ifelodun, Ila, Ilesa east, Ilesa west, Irepodun, Irewole, Isokan, Iwo, Obokun, Odo otin, Ola Oluwa, Olorunda, Oriade, Orolu and Osogbo. The State is educationally enriched with various institutions with numerous primary and secondary schools both in the public and private sector. The State has Technical schools, Schools of Health technology, Schools of Nursing and Midwifery, two government polytechnics and three privately owned; two public universities and five private ones. The people of the State are mostly civil servants traders, artisans and farmers. The farmers produce food crops such as yam, maize, cassava, beans and cocoyam. The cash crops include tobacco and palm produce. The artisans

make hand-woven textiles, tie and dye clothes, leather work, calabash, carving and mat-weaving. Mineral resources include gold, clay, lime stones and granite

The State has a rich cultural heritage which shows in their music, art, dances, dresses and cultural festivals. They are well known for their talking drums and bata music. They are also known for excellent works of art. Some tourist attractions in Osun State include

- The famous Ife bronze,
- The Oranmiyan Staff which is believed to be the fighting stick of Oranmiyan, the son of Oduduwa who was a great warrior and
- The popular Osun-Osogbo cultural festival.
- The Ife Museum ,
- Obafemi Awolowo University Zoological gardens, Ile-Ase.
- Yeyemolu Shrines and Oduduwa groove, Ile-Ife.
- Osun Osogbo Sacred Groove - venue of the internationally recognized Osun Osogbo festival and a UNESCO, world heritage site
- Adunni Susan Wengers Centre,
- Genesis Arts Gallery
- Nike Arts Gallery,
- Jalumi War Site, Inisa
- The Olumirin Water-Falls, Erin-Ijesa, Igbo-Sango at Ede and the Ayikunugba Water-Falls at Oke-Ila. (www.osunstate.gov.ng, 2017).

3.3 Sample Frame (*N*) of the Study

The sample frame (*N*) of this study consists of the members of Cooperative Investment and Credit societies Limited (CICSL) that cut across Osun State. Based on the information from the Chief Registrar of Cooperative (Osun State, 2017), there are 1,468 functional Cooperative Investment and Credit Society Limited (CICSL) with total membership strength of 79,392 across 30 LGAs in Osun State.

Table 3.1: Source List (*N*) of Cooperative Investment and Credit Societies Limited (CICSL) and their Membership Strength in Various Local Government Area of Osun State

SN	Cooperative Zones	L. G. A.	LGA Head Quarters	No of CICSL	Mem. Size
1	<i>Osogbo Zone:</i>	Osogbo	Osogbo	92	9,939

2		Olorunda	Igbonna	143	18,105
3		Orolu	Ifon	52	1,714
4		Irepodun	Ilobu	46	866
5	Ede Zone	Ejigbo	Ejigbo	67	1,362
6		Iwo	Iwo	42	986
7		Aiyedire	Ile Ogbo	23	785
8		Ede North	Oja Timi Ede	66	878
9		Ede South	Oke iresi Ede	62	696
10		Egbedore	Awo	14	393
11	Ife Zone:	Irewole	Ikire	27	437
12		Aiyedaade	Gbongan	25	720
13		Isokan	Apomu	12	233
14		Ife Central	Ile Ife	82	8,071
15		Ife East	Oke Ogbo	48	509
16		Ife North	Ipetumodu	56	379
17		Ife South	Ifetedo	30	675
18		Ola Oluwa	Bode Osi	35	486
19	Ilesha Zone:	Obokun	Owa	58	271
20		Ilesa East	Iyemogun- Ilesa	41	498
21		Ilesa West	Ilesa	76	8,435
22		Oriade	Ijebu Ijesa	61	759
23		Atakunmosa East	Iperindo	23	208
24		Atakunmosa West	Oshu	29	347
25	Ikirun Zone:	Ifedayo	Oke- Ilaorangun	14	171
26		Boluwaduro	Otan- Ayeigbaju	28	328
27		Boripe	Iragbiji	47	694
28		Odo Otin	Okuku	38	503
29		Ifelodun	Ikirun	89	1,076
30		Ila	Ilaorangun	42	637
		30 LGAs		1,468	79,392

Source: Office of Chief Registrar of Cooperative (Osun State, 2017)

3.4 Sample Size(*n*) Determination and Sampling Technique Procedure

Since the sampling unit is known and the study sample frame is finite, and the parameter of interest was cooperative members. The study parameter of interest consists of 79,392 cooperative members from the sampling frame of 1,468 CICSL.

Non-random sampling technique (Judgemental) was used to select 70% ($1,468 \times 0.7 = 1,027$) of the CICSL. The 70% was considered to be convenient and manageable size, most importantly to have appropriate and effective representation and for generalization in decision making. Consequently, three (3) Local Government Areas were purposively selected from each cooperative zone in Osun State. These LGAs were selected due their viability; proximity and high concentration of CICSL in their area.

Table 3.2: Sampling Frame(n)Distribution in Cooperative Zones of OsunState

SN	Cooperative Zones	Local Government Area	No of CICSL in LGAs	Membership Size
1	<i>Osogbo Zone:</i>	Oshogbo	92	9,939
2		Olorunda	143	18,105
3		Orolu	52	1,714
4	<i>Ede Zone</i>	Ejigbo	67	1,362
5		Ede North	66	878
6		Ede South	62	696
7	<i>Ife Zone</i>	Ife Central	82	8,071
8		Ife East	48	509
9		Ife North	56	379
10	<i>Ilesa Zone</i>	Ilesa East	41	498
11		Ilesa West	76	8,435
12		Oriade	61	759
13	<i>Ikirun Zone:</i>	Boripe	47	694
14		Ifelodun	89	1,076
15		Ila	42	637
	5 Coop. Zones	15 LGAs	1,024	53,752

To reduce the sample size to a manageable size, online sample size calculator was used to determine the manageable sample size (Survey monkey, 2017). With this approach, a total of 53,752 CICSLmembers with 99% confidence interval were coded in the online sample size calculator. The result output of the online sample size calculator was 951 respondents.

In order to have good representativeness in the distribution of questionnaire Bowler (1999) method was used to proportionately distribute the sample size among members of the CICSL across the cooperative zones in Osun State. The formular is:

Number of Total Membership x Sample Size

Total population

1

Thus:

$$\begin{aligned} \text{OshogboLGA} &= \frac{9,939}{53,752} \times \frac{951}{1} = \mathbf{175.8} \text{ Respondents} \\ \text{OlorundaLGA} &= \frac{18,105}{53,752} \times \frac{951}{1} = \mathbf{320.3} \text{ Respondents} \\ \text{OroluLGA} &= \frac{1,714}{53,752} \times \frac{951}{1} = \mathbf{30.3} \text{ Respondents} \\ \text{EjigboLGA} &= \frac{1,362}{53,752} \times \frac{951}{1} = \mathbf{24.1} \text{ Respondents} \\ \text{Ede North LGA} &= \frac{878}{53,752} \times \frac{951}{1} = \mathbf{15.5} \text{ Respondents} \\ \text{Ede SouthLGA} &= \frac{696}{53,752} \times \frac{951}{1} = \mathbf{12.3} \text{ Respondents} \\ \text{Ife CentralLGA} &= \frac{8,071}{53,752} \times \frac{951}{1} = \mathbf{142.7} \text{ Respondents} \\ \text{Ife EastLGA} &= \frac{509}{53,752} \times \frac{951}{1} = \mathbf{9.1} \text{ Respondents} \\ \text{Ife NorthLGA} &= \frac{379}{53,752} \times \frac{951}{1} = \mathbf{6.7} \text{ Respondents} \\ \text{Ilesa East LGA} &= \frac{498}{53,752} \times \frac{951}{1} = \mathbf{8.8} \text{ Respondents} \\ \text{Ilesa WestLGA} &= \frac{8,435}{53,752} \times \frac{951}{1} = \mathbf{149.2} \text{ Respondents} \\ \text{OriadeLGA} &= \frac{759}{53,752} \times \frac{951}{1} = \mathbf{13.4} \text{ Respondents} \end{aligned}$$

$$\begin{aligned} \text{BoripeLGA} &= \frac{694}{53,752} \times \frac{951}{1} = \mathbf{12.2} \text{ Respondents} \\ \text{IfelodunLGA} &= \frac{1,076}{53,752} \times \frac{951}{1} = \mathbf{19.1} \text{ Respondents} \\ \text{IlaLGA} &= \frac{637}{53,752} \times \frac{951}{1} = \mathbf{11.3} \text{ Respondents} \end{aligned}$$

Therefore, the questionnaires were randomly distributed among the members of CICS Lin these Local Government Areas, as shown in Table 3.2. Thus, 951 structured questionnaires were administered to 951 respondents but 864 valid responses were retrieved.

The 864 valid responses obtained, representing 90.8%, indicated that there was high rate of success recorded from the valid responses from questionnaire administration.

3.5 Source of Data Collection

The data were sourced from both the primary and secondary sources. The primary data were those first hand data and information gotten from the respondents and the method was through the use of structured questionnaire, while secondary sources are those data and information other than first hand, and this was sourced from the use of journal, library, textbooks, research reports, as well as the internet.

3.6 Description of Data Collection Instrument

Structured questionnaire was used to collect information (data) from the respondents. The questionnaire was structured into five sections (A, B, C, D & E). Section A was structured to collect socio-economic data, section B was designed with five-point Likert scale to ascertain the influence amount invested on joint risk ventures CICS Lin on financial inclusion indicator (Usage of financial services) and section C on the questionnaire was structured to get the opinion of respondents on the effect of collective enterprises ownership on the cooperative members' financial inclusion indicators and this was structured with five points Likert scale. Section D was

equally designed scale measurement so as to determine the effects of innovative training on financial inclusion indicators. Finally, section E of the instrument was designed to evaluate the relationship between social capital and financial inclusion among members of CICSL in Osun State.

3.7 Validation of Research Instrument

The validation of research instrument was deemed necessary to determine which questions actually elicit the relevant information so as to enable the researcher achieve the study objective. Therefore, the questionnaire was subjected to validity test through the scrutiny and modifications by the Supervisor, and five other research experts from the Faculty of Management Sciences and Statistics Department. Copies of the structured questionnaire were given to them for their inputs and their inputs were adequately corrected.

3.8 Reliability Test and Internal Consistent Test of Data Collection Instrument

3.8.1 Reliability Test: In order for the structured questionnaire to pass reliability test, the researcher adopted test-re-test method where 20 copies of questionnaires were administered to the cooperative members after the interval of two weeks. Another set of same structured questionnaires were administered to the same set of the respondents and the two responses were subjected to Correlation Matrix Using EView Software.

This is used to determine the reliability of the responses of respondents. The response is reliable if the respondent can repeat or present almost the same response as present in the past on the same scale or item.

The research tool was distributed twice to the same group of respondents. Product Moment Correlation was used to determine how close the responses are based on the number of times the research tool was distributed.

**Table 3.3: Reliability of Responses: (Correlation Analysis)
Summary of Correlation Matrix Using E View Software**

	<i>First R</i>	<i>Second R</i>
First R	1.000000	1.000000
Second R	0.985675	1.000000

Decision Rule: The correlation value can be used to determine nature and strength of relationship between variables. Correlation value less than 0.5 is an indication of weak relationship but value greater than 0.5 implies strong relationship. If the value is negative, there exists inverse relationship between variables, but positive correlation implies direct relationship. Correlation value of 1 implies perfect relationship but 0 implies spurious relationship.

Interpretation: From the correlation matrix, the correlation between responses of the first set of research tool and the second set is *0.985675* which is positive and greater than 0.5. This can be interpreted as positive relationship and strong; strong positive relationship between the responses.

In a layman's language, there exists strong relationship between the first responses and the second responses of the respondents. Since the correlation is positive, the responses of the respondents in the first set of the research tool are similar to the responses in the second set. Therefore, the responses are reliable and can be used for decision making.

3.8.2 Internal Consistent Test: Test was further conducted to determine the level of internal consistency on the responses of the respondents, so as to avoid wrong decision and conclusion of the study. Internal consistency test was conducted with Cronbach's Alpha at 5% level of significance. In this case, Cronbach's Alpha was adopted since it has ability to determine the strength or importance of each item in the research tool.

Decision Rule: Internal consistency which is as a result of higher variance among the items can be used to validate research tool. Based on literature, Cronbach's Alpha is a strong statistic for the test of consistency. Alpha value greater than 60% implies responses are reliable and consistency and alpha value less than 60% is an indication of weak or inconsistent responses.

Interpretation: If-Item-deleted is used to determine the alpha value if a particular item is removed among the lot. The last column of the Table shows alpha value. If the value is greater than 85.2%, then, the removal of such item will improve the alpha value or the consistency of the tool.

Considering the values, the removal of any of the items cannot lead to increase in the alpha value which implies all the items are necessary in the model.

Table 3.4: Output of Cronbach's Alpha Test

Case Processing Summary			
		N	%
Cases	Valid	864	100.0
	Excluded ^a	0	.0
	Total	864	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.852	89

Alpha value is 85.2% which is greater than 60%. This is an indication that the responses are reliable for decision making.

3.9 Administration and Collection of the Research Instrument

The questionnaire was administered using well trained enumerators from selected 15 LGAs. This was necessary because of location of the study area and tight schedule of the researcher. Fifteen (15) trained research assistants (enumerators) were used to administer questionnaires for the study.

3.10 Data Analytical Method

Data was analyzed using descriptive and inferential statistics. Descriptive statistics used include mean and standard deviation while the inferential statistics models used include correlation statistics model, Pearson's product moment correlation and regression. The inferential statistics models were equally used to test the formulated hypotheses.

Objective one was analyzed with mean scores obtained from the 5-point scale analysis with the threshold of 3.0 and these mean scores were subjected to correlation statistics. Considering the variables, the independent variable (x) was measured in terms of estimated amount invested over five years and the dependent variable is usage of savings (y). Since dependent and independent variables can be identified, the most appropriate correlation approach is Product Moment Correlation.

Furthermore, objective two was analyzed with Partial correlation so as to ascertain the nature of relationship that exists between collective ownership of cooperative enterprises and members access, usage and quality of loan facilities in CICSL

In objective three, partial correlation was used to determine the influence among the variables. Partial correlation was used to ascertain the correlation between innovative training and financial inclusion.

In objective four, the most appropriate test statistic is Product Moment Correlation was for nature of relationship between social capital and member's usage and quality of savings

3.10.1 Analytical Method for Hypotheses Testing

In testing hypothesis one (H_{01}) Ordinary Least Square Regression (Simple Linear Regression) was used since it is about determination of influence of independent variable (x) on dependent variable (y). OLS regression analysis model was used, so as to determine the degree of the relationship between dependent variable and independent variable.

The model is explicitly states as;

$$Y_i = a + bx$$

Where

Y= dependent variable (Financial inclusion in terms of *usage* of saving facilities)

x = independent variable (Estimated amount of money members invested in risk sharing)

β = Regression Coefficient of Independent Variables

Hypothesis two (H_{02}) was tested with Multivariate Regression Model (mvreg $y_1 y_2 y_3 = x$). The Multivariate Regression model was also used to test H_{02} . This was used to find out the influence of independent variable on more than two or more dependent variables.

The model in the implicit form is specified as:

$$y_1 + y_2 + y_3 = \beta_0 + \beta_1 x + e_i$$

Where

x = Independent variable (Collective Ownership of an enterprise)

$y_1; y_2$ & y_3 = Dependent variables (Financial Inclusion indicators (Access; Usage & Quality))

μ = Error Term (unexplained variables)

β_i = Coefficient of x_i input (x_i = Independent Variables)

β_0 = Constant term

The explicit form of the model is:

$$Acc_1 + Usu_2 + Qua_3 = \beta_0 + \beta_i COE + \mu$$

COE_i = Collective Ownership of an enterprise

Acc_1 = Access to loan facilities (loan timely approval & approval; interest rate etc)

Usu_2 = Usage (number of time using loan facilities)

Qua_3 = Quality (estimated amount loan obtained)

μ = Error Term (expectation of unexplainable variables)

β_i = Regression Coefficient of Independent Variables)

β_0 = Constant term

Hypothesis three (H_{03}) was equally tested with Multivariate Regression Model (mvreg $y_1 y_2 y_3 = x$). The Multivariate Regression model was also used to test H_{03} as it was used to determine the influence of independent variable on more than two or more dependent variables.

The model in the implicit form is specified as:

$$y_1 + y_2 + y_3 = \beta_0 + \beta_1 x + e_i$$

Where

x = Independent variable (Collective Innovative Training)

$y_1; y_2$ & y_3 = Dependent variables (Financial Inclusion indicators (Access; Usage & Quality))

μ = Error Term (unexplained variables)

β_i = Coefficient of x_i input (x_i = Independent Variables)

β_0 = Constant term

The explicit form of the model is:

$$Acc_1 + Usu_2 + Qua_3 = \beta_0 + \beta_i CIT + \mu$$

CIT_i = Collective Innovative Training

$Acss_1$ = Access to loan facilities (loan timely approval & approval; interest rate etc)

Usu_2 = Usage (number of time using loan facilities)

Qua_3 = Quality (estimated amount loan obtained)

μ = Error Term (expectation of unexplainable variables)

β_i = Regression Coefficient of Independent Variables)

β_0 = Constant term

Similarly, Hypothesis four (H_{04}) was tested with Multivariate Regression Model (mvreg $y_1 y_2 y_3 = x$). The Multivariate Regression model was also used to test H_{04} . This was used to find out the influence of independent variable on more than two or more dependent variables.

The model in the implicit form is specified as:

$$y_1 + y_2 + y_3 = \beta_0 + \beta_1 x + e_i$$

Where

x = Independent variable (Collective Social Capital)

y_1 & y_2 = Dependent variables (Financial Inclusion indicators (Usage & Quality))

μ = Error Term (unexplained variables)

β_i = Coefficient of x_i input (x_i = Independent Variables)

β_0 = Constant term

The explicit form of the model is:

$$Acc_1 + Usu_2 + Qua_3 = \beta_0 + \beta_i CSC + \mu$$

CSC_i = Collective Social Capital

Usu_1 = Usage (number of time using loan facilities)

Qua_2 = Quality (estimated amount loan obtained)

μ = Error Term (expectation of unexplainable variables)

β_i = Regression Coefficient of Independent Variables)

β_0 = Constant term

3.10.2 Regression Analysis

This was used to determine mathematical relationship between two variables which can be used to extrapolate. Where independent and dependent variable exists, regression model was used to determine the percentage of fluctuation in the dependent variable that the independent variable can explain, coefficient of determination (R^2). Regression model can be linear or non-linear. If the relationship can be captured with a straight line, then, linear regression model is required otherwise, non-linear regression is appropriate.

Regression model can be simple, multiple or multivariate. If only one independent variable exists in the model, simple linear regression is required. If more than one independent variable exists, with one dependent variable, multiple regression is required. More than one independent and more than one dependent variable requires multivariate regression model. In this research, simple

and multivariate linear regression models were used to determine the relationship among variables of interest.

T- Test was used to test the validity of the parameter estimate. In other words, it was used to decide whether the estimate (independent variable) is significant or not. The above stated statistics were used to analyze the problem under study. The researcher analyzed the data with the software applications of E view; Stata; Minitab; Excel, as well as SPSS version 20

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

Introduction

This chapter is exclusively for the analysis of data and presentation of data obtained from the respondents through research instruments. The chapter focused on the test of the hypotheses formulated for the study. The chapter four equally responsible for the discussions of results that were deduced from the data analyzed.

4.1.1: The Extent Which the Estimated Amount Members Invested In Risk Sharing Enterprise of Cooperative Influences Their Usage of Savings Facilities

Table 1: Distributions of Responses on the Estimated Amount of Money Invested by the Members on Risk Sharing Enterprises over 5 Years

Estimated Amount (₦) Invested on Joint Risk Enterprise		2012		2013		2014		2015		2016	
		<i>Freg.</i> <i>n=864</i>	<i>%</i> <i>(100)</i>	<i>Freg.</i> <i>n=864</i>	<i>%</i> <i>(100)</i>	<i>Freg.</i> <i>n=864</i>	<i>%</i> <i>(100)</i>	<i>Freg.</i> <i>n=864</i>	<i>%</i> <i>(100)</i>	<i>Freg.</i> <i>n=864</i>	<i>%</i> <i>(100)</i>
1	Less than ₦ 100,000	185	21.41	86	9.95	61	7.06	49	5.671	38	4.398
2	₦ 100,001 – ₦ 500,000	539	62.38	264	30.55	218	25.23	171	19.79	204	23.61
3	₦ 500,001 – ₦ 1,000,000	137	15.85	421	48.72	397	45.94	415	48.03	341	39.46
4	₦ 1,000,001 – ₦ 2,000,000	03	0.003	82	9.49	139	16.08	177	20.48	192	22.22
5	₦ 2,000,001 – ₦ 5,000,000	--	--	11	1.273	49	5.67	52	6.018	89	10.30
6*	₦ 5,000,001 – ₦ 10,000,000	--	--	--	--	--	--	--	--	--	--
7*	Above ₦ 10,000,000	--	--	--	--	--	--	--	--	--	--
<i>Average (x)</i>		<i>₦274,825.338</i>		<i>₦1,121,500.8</i>		<i>₦1,492,400.3</i>		<i>₦ 1,625,000.5</i>		<i>₦ 1,836,700.6</i>	

Source: Field Survey July, 2017

Table 2: Distribution of Responses on How Often Respondents Make Use of Saving Facilities of Cooperative

S/N	Indicators for the Usage of Savings Services in CICSL	Mean (\bar{x})	Implication
i	Making use of Savings facilities Daily	2.765	Not Regularly Use
ii	Making use of Savings facilities Weekly	3.054	Regularly Use
iii	Making use of Savings facilities Monthly	4.452	Regularly Use
iv	Making use of Savings facilities Quarterly	4.065	Regularly Use
v	Making use of Savings facilities Yearly (annually)	4.653	Regularly Use
vi	Making use of Savings facilities at Will	2.460	Not Regularly Use
vii.	Making use of Savings facilities Randomly	2.054	Not Regularly Use

Source: Field Survey July, 2017

Grand Mean (x) =3.584

Table 3: Distribution of Average amount of Money Members Invested in Risk Sharing Enterprise of CICSL and its Influence on Usage of Savings Facilities

Financial Year	Average Amount Invested Per year in Naira	Usage of Savings
2012	274,825.338	2.765
2013	1,121,500.8	3.054
2014	1,492,400.3	4.452
2015	1,625,000.5	4.065
2016	1,836,700.6	4.653

Source: Field Survey July, 2017

Average (x) Value for the 5 years = ₦ 135,426.154

Grand Mean (x) = 3.753

The above result revealed the estimated amount of money invested by the cooperative members in an enterprise that they jointly owned. Evidence from the result Table 3 revealed that members investment in the risk sharing enterprise increased on yearly basis. Similarly, there is yearly improvement on how often the members made of saving facilities.

Table 4: Correlations Outputs for Relationship Between Estimated Amount Invested in Risk Sharing and Usage of Savings Facilities of CICSL

		Risk Amount	Usage
Risk Amount	Pearson Correlation	1	.740
	Sig. (2-tailed)		.049
	N	5	5
Usage	Pearson Correlation	.740	1
	Sig. (2-tailed)	.049	
	N	5	5

Source: Field Survey July, 2017

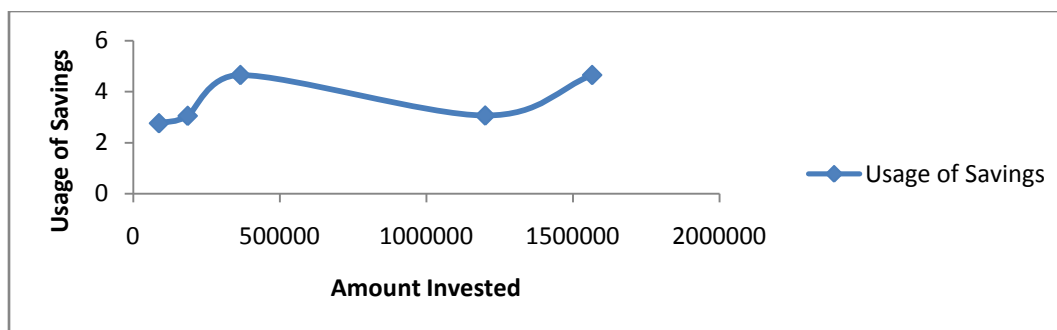


Figure 3: Scatter Pot Value of Amount Invested in Risk Sharing and Usage of Savings

Source: Field Survey July, 2017

To examine the extent which the amount cooperative members invested in risk sharing enterprise of cooperative influences their usage of savings was analyzed with correlation coefficient. The extent of influence was examined using correlation coefficient. The Correlation Analysis was used to estimate extent in terms of nature and strength of relationship between amounts invested and how often members use savings facilities. The variables of interest are the estimated amount of money cooperative members invested over five years and usage of saving. The result of the analysis presented showed that as the years went by there was an increment in the amount of money invested by the members in risk sharing enterprise and usage of savings facilities. The correlation coefficient is **0.74** which implied that the variables are positively strong. This implied the independent variable is significantly influencing the dependent variable.

Equally, it was indicated in Table 3 where the amount invested in risk sharing enterprise significantly increase alongside with the usage of savings facilities. The result Table 3 also indicated that 2016 has the highest increment with average of **₦ 1,836,700.6** from the estimated amount of money invested in risk sharing and usage of savings has average mean response of $x = 3.453$. With the trend of increment between amount invested in risk sharing and saving usage it can deduce that both variables have a positive relationship.

Figure3 showed a straight line that the estimated amount in risk sharing has positive and linear relationship which is capable of influencing each other.

4.1.2: Test of Hypothesis One (H_{01})

H_{01} : The amount cooperative members invested in joint risk enterprises of cooperative has no significant influence on their usage of savings facilities in cooperative investment and credit society limited

H_{a1} : The amount cooperative members invested in joint risk enterprises of cooperative has significant influence on their usage of savings facilities in Cooperative Investment and Credit Society Limited

Table 4: Summary of Available Data Obtained from Table 3

Financial Year	Average Amount Invested Per year in Naira (x)	Usage of Savings (y)
2012	87,436	2.765
2013	185,376	3.054
2014	365,258	4.653
2015	120,0435	3.065
2016	1,565,302	4.653

Source: Field Survey July, 2017

In order to ascertain the extent and nature of influence, Ordinary Least Square Regression (Simple Linear Regression) was used to test the hypothesis since it is about determination of influence of a variable on another variable.

Table 5: Hypothesis One (Ho₁) E view Software Output for Simple Linear Regression (OLS) Analysis Model (y (Usage of Saving Facilities) = C (1) + C (2)* x (Amount of Risk Sharing))

Dependent Variable: USAGE

Method: Least Squares

Date: 07/23/17 Time: 18:58

Sample: 1 5

Included observations: 5

y (Usage of Saving Facilities) = C(1) + C(2)* x
(Amount of Risk Sharing)

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	3.214988	0.660653	4.866379	0.0166
C(2)	6.21E-07	7.33E-07	0.848236	0.0486
R-squared	0.793441	Mean dependent var		3.638000
Adjusted R-squared	0.695412	S.D. dependent var		0.934340
S.E. of regression	0.008930	Akaike info criterion		3.063925
Sum squared resid	2.816475	Schwarz criterion		2.907701
Log likelihood	-5.659813	Hannan-Quinn criter.		2.644633
F-statistic	8.719504	Durbin-Watson stat		3.037931
Prob(F-statistic)	0.048623			

Decision Rule: Accept the null hypothesis if the P-value of the model is greater than 0.05, otherwise, reject.

Model Interpretation:

The simple regression coefficient Table 5 results show that there is positive(**0.048**)relationship between the two variables (x & y) which is significant at 5% level since their probability (p) value is less than the conventional threshold of 0.05.

The coefficient of determination (R^2) of the model is **0.793441** which shows the percentage of fluctuation in the dependent variable (y) that can be explained by the independent variable (x). That is, **79.3%** fluctuation in the dependent variable (y) that can be explained by the independent variable (x), which implied that, amount cooperative members invested in risk sharing enterprise

is capable of influencing their financial inclusion in terms using savings facilities regularly. Thus, 1% increase in the amount of money member invested in risk sharing enterprise will influence their usage of savings facilities by 81%. Also, T-test was used to determine the significance of parameters in the model. The P-value of the T-test is less than 0.05 which implies the parameters are significant.

As such, there is existence of enough evidence to reject the null hypothesis and conclude that the amount cooperative members invested in joint risk enterprises of cooperative has significant influence on their usage of savings facilities in Cooperative Investment and Credit Society Limited

Moreover, the simple regression coefficient of the hypothesis one (H_{o1}) results further strengthens the above result findings from the descriptive statistics and affirms that there is positive (0.048) relationship between the two variables (x & y) which was significant at 5% level and variables probability (p) value is less than the conventional threshold of 0.05.

4.2 .1: The Influence Of Collective Ownership of Cooperative Enterprises On Members Access, Usage And Quantityof Loan Facilities in CICSL

Table 6: Distribution of Responses on the Jointly-OwnedEnterprises/Investments of the CICSL

S/N	Jointly-Owned Enterprise Indicators	Mean (\bar{x})	Implication
i	Farm/agricultural enterprise e.g fish farm, livestock farm, farm produce processing, farm equipment hiring; cash crop farm; plantain & potatoes chip; processing & packing of garri; fufu; beans; amala; etc	3.683	Great Extent
ii	Hiring of event and ceremony equipments and materials like canopy; chairs; tables; cooling van & refrigerator; cooking utensils; coolers; DJ equipment; speaker; etc	3.464	Great Extent
iii	Consumer and Trading shop e.g food stuff & provision store; cement business; stationeries shop; wood & plank business; plumbing materials shop; spare parts shop; electronics & electrical shop; etc	4.827	Great Extent
iv	Housing & estate management and land business e.g construction; renting and selling of shops; rooms; flats and duplex; buying and selling of plots of land to members and non-members; etc	3.417	Great Extent
v	Manufacturing and production of goods and services like block industry; sachet pure water production; laundry & dry cleaning services; printing press services; paint production; etc	2.668	Low Extent
vi	Transportation services e.g sale; hiring and higher purchase services of bus, car, tricycle, motorcycle; shuttle bus etc	3.117	Great Extent
vii.	Oil & gas business e.g Filling station business; engine oil sales; cooking gas refill & sales etc	1.800	Low Extent

Source: Field Survey July, 2017

Grand Mean (\bar{x}) = 3.2822

Table 7: Distribution of Responses on the Members Access to LoanFacilities of the Cooperative

S/N	Access to Loan Facilities Indices	Mean (\bar{x})	Implication
i	CICSL Timely availability and approval of loan applications	3.2424	Accessible
ii	Approval of exact amount of loan on the members application form without reducing the amount	3.8646	Accessible
iii	Attractive and moderate interest rate attached to loan	4.3518	Accessible
iv	Direct disbursement of credit to members bank account as against cash payment	3.9428	Accessible
v	Flexible repayment method & pattern	3.4683	Accessible
vi	little or no stress in filling the loan application form	4.0477	Accessible
vii.	Timely disbursement of loan to members after the approval	3.3093	Accessible

Source: Field Survey July, 2017

**Grand Mean (x) = 3.7467*

Table 8: Usage of Loan Facilities of the Cooperative

S/N	Indicators for the Usage of Loan facilities	Mean (\bar{x})	Implication
i	Making use of Loan facilities Monthly	2.2126	Regularly Use
ii	Making use of Loan facilities Quarterly	2.5641	Regularly Use
iii	Making use of Loan facilities Bi annual (Twice yearly)	3.6253	Regularly Use
iv	Making use of Loan facilities Yearly (annually)	4.4422	Regularly Use
v	Making use of Loan facilities once in 2 Years	3.5688	Regularly Use
vi	Making use of Loan facilities once in 3 Years	2.2263	Rarely Use
vii.	Making use of Loan facilities only at time of urgent needs or issues	3.3197	Rarely Use

Source: Field Survey July, 2017

**Grand Mean (x) = 3.7084*

Table 9: The Quantity (Amount) of Loan Facilities Available

Estimated Amount (Naira) benefited Over the Years		2012		2013		2014		2015		2016	
		<i>Freq.</i> <i>n=864</i>	<i>%</i> <i>(100)</i>	<i>Freq.</i> <i>n=864</i>	<i>%</i> <i>(100)</i>	<i>Freq.</i> <i>n=864</i>	<i>%</i> <i>(100)</i>	<i>Freq.</i> <i>n=864</i>	<i>%</i> <i>(100)</i>	<i>Freq.</i> <i>n=864</i>	<i>%</i> <i>(100)</i>
1	Less than ₦ 100,000	276	31.94	208	24.07	126	14.58	110	12.73	74	8.564
2	₦ 100,001 – ₦ 500,000	319	36.92	415	48.08	372	43.05	239	27.66	231	26.73
3	₦ 500,001 – ₦ 1,000,000	254	29.39	179	20.07	311	35.99	319	36.92	346	40.04
4	₦ 1,000,001 – ₦ 2,000,000	17	1.967	51	5.902	34	3.935	106	12.26	147	17.01
5	₦ 2,000,001 – ₦ 5,000,000	--	--	11	1.273	21	2.430	87	10.06	64	7.407
6	₦ 5,000,001 – ₦ 10,000,000	--	--	--	--	--	--	03	0.347	02	0.231
7	Above ₦ 10,000,000	--	--	--	--	---	--	--	--	--	--
<i>Average (x) Values</i>		₦78,200.8		₦75,040.6		₦920,200.8		₦1,310,833.6		₦1,291,167.5	

Source: Field Survey July, 2017

Table 10: Summary of Available Data from the Responses on Collective Ownership of Cooperative Enterprises (Table 6), Members Access (Table 7), Usage (Table 8), and Quantity of Loan Facilities (Table 9), in CICSL

<i>S/N</i>	<i>Mean (x) Scores for Collective Ownership Indicators</i>	<i>Mean (x) Scores for Access to Loan</i>	<i>Mean (x) Scores for Usage of Loan Facilities</i>	<i>Mean (x) Values for Quantity of Loan in Naira (₦) for 5 Years</i>
1	3.6832	3.2424	2.2126	78,200.8
2	3.4644	3.8646	2.5641	75,040.6
3	4.8271	4.3518	3.6253	920,200.8
4	3.4174	3.9428	4.4422	1,310, 833.6
5	2.6685	3.4683	3.5688	1,291,167.5
6	3.1174	4.0477	2.2263	--
7	1.8004	3.3093	3.3197	--
<i>Grand Mean (x)</i>	<i>3.2822</i>	<i>3.7467</i>	<i>3.1084</i>	<i>₦735,088</i>

Source: Field Survey July, 2017

The result Table of 6; 7; 8; and 9 was summarized in Table 10. The finding from the Table 6 showed that the cooperative members are so much (*Grand Mean (x) = 3.2822*) involved and committed to various enterprises that are jointly owned. Some of the jointly-owned enterprises are agricultural business (3.68); hiring services (3.46); trading (4.82); housing and landed

property (3.41); as well as transportation business (3.11). In the same vein, the result obtained from Table 7 revealed that loan facilities are highly accessible (*Grand Mean* $(\bar{x}) = 3.7467$) to the members of CICSLS. The indicators that made loan facilities to be highly accessible include timely availability of loan (3.24); moderate interest rate (4.3); direct payment into members bank account (3.9); flexible repayment method (3.4), little stress in filling application forms (4.04) as well as timely disbursement of loan (3.03). The result on the usage of loan facilities indicated that the respondents regularly (*Grand Mean* $(\bar{x}) = 3.108$) make use of the loan facilities of the cooperative society but, mostly (4.4422) the majority of the respondents make use of loan facilities once in a year (Annually), while some (3.30) of them make use of the loan facilities only when they have urgent and pressing needs. Finally, the results of quantity amount of loan on table 9 showed that reasonable amount of loan is usually disburse to the cooperative members on yearly basis but on the 5 years average the cooperative disbursed ₦735,088 which is reasonably okay to invest in any innovative start up enterprise.

To evaluate the influence that exist between the Collective Ownership of Cooperative Enterprises (Table 6), Members Access (Table 7), Usage (Table 8), and Quantity of Loan Facilities (Table 9), in CICSLS, the most appropriate test statistic is partial correlation. Partial correlation was used to evaluate the nature of influence of one variable on another when other existing variables are under control.

Table 11: Partial Correlation Output for Relationship Between Collective Ownership of Cooperative Enterprises and Members Access to Loan Facilities of the Cooperative

Control Variables			Ownership	Access
Usage & Quantity	Ownership	Correlation	1.000	-.463
		Significance (2-tailed)	.	.432
		df	0	3
	Access	Correlation	-.463	1.000
		Significance (2-tailed)	.432	.
		df	3	0

Source: Field Survey July, 2017

Table 12: Partial Correlation Output for Relationship Between Collective Ownership of Cooperative Enterprises and Members Usage of Loan Facilities of the Cooperative

Control Variables			Ownership	Usage
Quantity & Access	Ownership	Correlation	.000	.857
		Significance (2-tailed)	.	.024
		df	0	3
	Usage	Correlation	.857	.000
		Significance (2-tailed)	.024	.
		df	3	0

Source: Field Survey July, 2017

Table 13: Partial Correlation Output for Relationship Between Collective Ownership of cooperative enterprises and members Quantity of Loan Facilities Obtained from the Cooperative

Control Variables			Ownership	Quantity
Access & Usage	Ownership	Correlation	1.000	-.121
		Significance (2-tailed)	.	.846
		df	0	3
	Quantity	Correlation	-.121	1.000
		Significance (2-tailed)	.846	.
		df	3	0

Source: Field Survey July, 2017

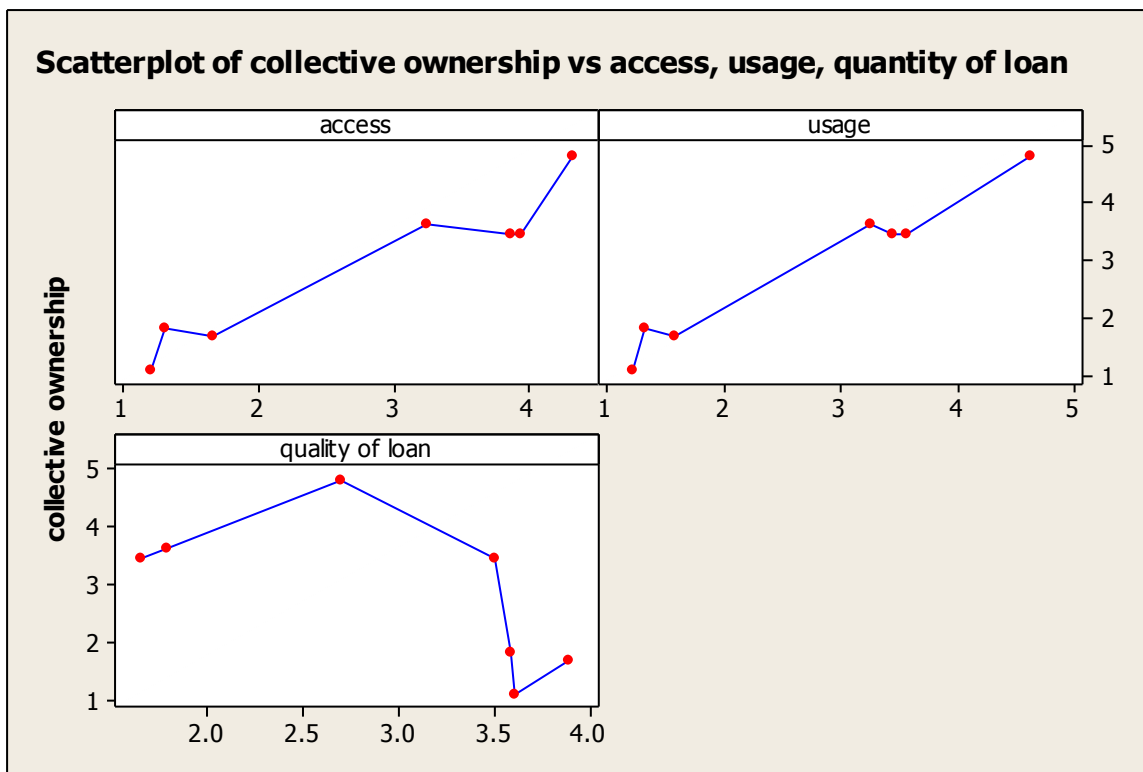


Figure 4: Scatter Plot of the Variables (Graphical Presentation)

Source: Field Survey July, 2017

Data obtained from the respondents on the nature of relationship that exist between collective ownership; and financial inclusion indicators of access, usage and quantity of loan (Table 6; 7; 8 and 9). The mean scores from these Tables indicated that the respondents positively and strongly responded to most of the questions on how collective ownership influence their access, usage and quality of loan, as most of the mean scores presented in Table 10 were higher than the threshold of 3.0 of 5 points scale analysis.

In result Table 6; 7; 8 and 9 the mean scores obtained from Tables were further subjected to partial correlation statistics model so as to ascertain the extent of relationship that exist between collective ownership of enterprise and financial inclusion indicators (access; usage and quantity of loan facilities of CICS). Partial correlation result Table 11 showed that, correlation coefficient (- 463) has a negative sign and the probability (P) value is 432 which is higher than the threshold of 0.05. By indication, there is existence of weak and negative relationship between

collective ownership of enterprise and members access to facilities of CICSL. This implied that cooperative member's joint or collective ownership of enterprises has nothing to do with their financial inclusion indicator of access to loan facilities. The implication of this finding is that cooperative members joint ownership of enterprises has no link or relationship with timely availability and approval of loan applications; approval of exact amount applied for; loan interest rate; direct disbursement of approved loan to members bank account; repayment as well as timely disbursement which are all indices to measure financial inclusion indicator of access to financial services.

The partial correlation result Table 12 presented the nature of relationship that exists between collective ownership (x) and member's usage of loan facilities (y). Evidence from the Table showed that correlation coefficient $.857$ indicated that there is strong evidence that positive relationship exist between variable x and y . The probability (P) value of 0.024 was significant at 5% level of significance, equally indicated that collective ownership of enterprise significantly relates to how often or how many times the cooperative members use loan facilities of the CICSL.

Table 13 partially correlates relationship between collective enterprise (x) and quantity of loan facilities (y) in terms estimated amount of loan obtained by the members. The correlation coefficient of $- .121$ indicated that there is existence of weak and negative relationship between collective ownership of enterprise and the quantity (amount) of loan facilities.

The results presented in Table 11, 12 and 13 were further subjected to scattered plot graph so as to graphically enhance and affirm the extent of relationship that exist between collective ownership of enterprise and financial inclusion indicators (access, usage and quantity of financial service/products. Evidence from the graphical presentation in Figure 2 further affirmed that weak and negative relationship exist between collective ownership and financial inclusion indicators of access and quantity of loan facilities, while there is existence of strong and positive relationship between collective enterprise and financial indicator of usage of loan facilities. This was confirmed from the graphical illustration where financial inclusion indicators of access and quantity do not have a perfect straight line, while usage has a straight line that stretched from y

axis to x axis. From the indication how often members use loan facilities of CICSL has a positive and strong relationship with collective ownership of cooperative enterprises.

4.2.2: Test of Hypothesis Two (H_{02})

H_{02} : Collective ownership of enterprises has not significantly influence members access; usage and quality of loan facilities in CICSL

H_{02} : Collective ownership of enterprises has significantly influence members access; usage and quality of loan facilities in CICSL

In order to accept or reject the above statement of hypothesis, multivariate regression model analysis was used to ascertain the influences of the independent variable (x) on the dependent variables (y_1 ; y_2 & y_3). Therefore, data were obtained from the available data in Table 10

Table 14: Summary of Available Data to Ascertain the Influence of Collective Ownership of Cooperative Enterprises on Members Access, Usage, and Quantity of Loan Facilities in CICSL

S/N	Collective Ownership (x)	Access to Loan (y_1)	Usage of Loan (y_2)	Quantity of Loan (y_3)
1	3.6832	3.2424	2.2126	78,200.8
2	3.4644	3.8646	2.5641	75,040.6
3	4.8271	4.3518	3.6253	920,200.8
4	3.4174	3.9428	4.4422	1,310, 833.6
5	2.6685	3.4683	3.5688	1,291,167.5
6	3.1174	4.0477	2.2263	--
7	1.8004	3.3093	3.3197	--

Source: Field Survey July, 2017

Model Specification

$$y_1 + y_2 + y_3 = \beta_0 + \beta_1 x + e_i$$

Where

x (Independent variable) is Collective Ownership of an Enterprise,

y₁; y₂& y₃. (Dependent variables) is Financial Inclusion indicators (Access; Usage & Quantity)

Table 15: Hypothesis Two Stata Software Output for Multivariate Regression Analysis Model ($Acc_1 + Usu_2 + Qua_3 = \beta_0 + \beta_i COE$)

Equation	Obs	Parms	RMSE	"R-sq"	F	P
y1	7	2	.4562986	0.9053	47.82396	0.2010
y2	7	2	.2584493	0.9689	155.821	0.0001*
y3	7	2	.7728865	0.4160	3.561744	0.1178

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
-----+-----						
y1						
x	-.9613426	.139013	6.92	0.201	.6039983 1.318687	
cons	.0531046	.4323415	0.12	0.907	-1.058265 1.164474	
-----+-----						
y2						
x	.982867	.0787375	12.48	0.043	.7804658 1.185268	
cons	-.0939952	.2448799	-0.38	0.717	-.7234791 .5354887	
-----+-----						
y3						
x	-.4443789	.2354627	-1.89	0.118	-1.049655 .1608971	
cons	4.226231	.7323076	5.77	0.002	2.343774 6.108687	

$$y_1 + y_2 + y_3 = \beta_0 + \beta_1 x + e_i$$

$$Acc_{0.9053} + Usu_{0.9689} + Qua_{0.4160} = .0531046 + .982867 COE$$

Model Interpretation:

The multivariate linear regression coefficient Table results show that the independent variable (x = collective ownership of enterprise) have positive relationship with the dependent variable y_2 (usage of loan facilities) since the probability y_2 (P value = **0.0001**) value is less than 0.05. The coefficient of independent variable (x) is **.982867**. The implication of this result is that there is positive and strong relationship between only the x & y_2 . That is, usage of loan facilities in only financial inclusion indicator that has positive and strong ties with the collective ownership of cooperative enterprise.

The R-Square of **0.9689** is considered very strong which implied that the independent variable (collective ownership of enterprise) can only explain 97% of the fluctuation in the dependent variable (usage of loan facilities). That is, member's regular usage of loan facilities can be influenced by 97% increase through their involvement in collective ownership of cooperative business. Thus, the coefficient of x (independent variable) was **.982867** which implied that 1 unit increase in collective ownership of enterprise (x) will influence usage of loan facilities (y_2) by **.982867**. That is, cooperative members' involvement in collective business enterprise will influence their usage of loan facilities in CICSLS.

However, T test result from the multivariate regression model result shows that the model is significant since the probability (P) value = **0.0001** was significant at 5% level of significance which is greater than the conventional threshold of 0.05. Conclusively, this can be interpreted as the independent variable has strong and positive effect on at least one (y_2) of the dependent variables as against the proposed hypothesis of all the dependent variables having negative effect. There was sufficient evidence to reject the null hypothesis while the alternate hypothesis was accepted. That is, collective ownership of enterprises has significantly influenced members access; usage and quantity of loan facilities in CICSLS.

The multivariate linear regression coefficient table results of the hypothesis two (H_{02}) revealed that the collective ownership of enterprise indicators have positive relationship with the usage of loan facilities since the probability y_2 (P value = **0.0001**) value is less than 0.05. The coefficient

of independent variable (x) is **.982867**. The implication of H_0 result was that there is positive and strong relationship between only the x & y_2 . That is, usage of loan facilities in only financial inclusion indicator that has positive and strong ties with the collective ownership of cooperative enterprise.

This finding further enhance the earlier result descriptive statistics obtained from 6; 7; 8; and 9 which established positive and strong relationship between collective ownership of cooperative enterprise and members' usage of loan facilities. This implied that among all other financial inclusion indicators it was only usage that can be influenced by the collective ownership of cooperative enterprise. Contrary to this finding,

Aina & Oluyombo (2014) found out from their study that access to financial services and products among the people was very high while the usage of financial services was very low. The implication of their result might be attributed to their failure to link collective ownership of enterprises to financial inclusion.

4.3.1: The Influence of Innovative Business Training Cooperative Members Received on Their Access; Usage and Quantity of Loan Facilities in CICSL

Table 16: Distribution of Responses on the Innovative Business Training Received By the Cooperative Members in the Past Five Years (2012-2016)

S/N	Innovative Business Training Indicators	Mean (\bar{x})	Implication
i	Organize training for members to acquire innovative vocational skills	3.6424	Regularly
ii	Facilitates identification of innovative Business opportunities for the members e.g value chain opportunities in agric business	3.8644	Regularly
iii	Training on how to draft and write business plan and business proposal	4.5271	Regularly
iv	Leadership training and innovative training on how to relate with customers	2.2093	Rarely
v	Innovative training on how to mobilize capital and finance members enterprise	3.8685	Regularly
vi	Innovative training on business management (planning, organizing; control etc) and credit management	3.4424	Regularly
vii.	Training on innovative method of production with cost efficient	2.8093	Rarely

Source: Field Survey July, 2017

***Grand Mean (x) = 3.4804**

Table 17: The Distribution of Responses Based on the Innovative business training received by the Respondents

S/N	Access to Loan Facilities Indices	Mean (x)	Implication
i	CICSL Timely availability and approval of loan applications	3.8474	Highly Accessible
ii	Approval of exact amount of loan on the members application form without reducing the amount	3.4641	Highly Accessible
iii	Attractive and moderate interest rate attached to loan	4.0231	Highly Accessible
iv	Direct disbursement of credit to members bank account as against cash payment	3.6062	Highly Accessible
v	Flexible repayment method & pattern	3.4640	Highly Accessible
vi	little or no stress in filling the loan application form	3.6429	Highly Accessible
vii	Timely disbursement of loan to members after the approval	4.2344	Highly Accessible

Source: Field Survey July, 2017

**Grand Mean (x) = 3.7545*

Table 18: Distribution of Responses on the Usage of Loan Facilities of the cooperative by the Respondents

S/N	Indicators for the Usage of Loan facilities	Mean (x)	Implication
i	Making use of Loan facilities Monthly	2.4644	Rarely Use
ii	Making use of Loan facilities Quarterly	3.9771	Regularly Use
iii	Making use of Loan facilities Bi annual (Twice yearly)	3.0493	Regularly Use
iv	Making use of Loan facilities Yearly (annually)	4.7685	Regularly Use
v	Making use of Loan facilities once in 2 Years	3.1524	Regularly Use
vi	Making use of Loan facilities once in 3 Years	3.1491	Regularly Use
vii.	Making use of Loan facilities only at time of urgent needs or issues	3.9861	Regularly Use

Source: Field Survey July, 2017

**Grand Mean (x) = 3.0563*

Table 19: Distribution of Responses Based On the Quantity (Estimated Amount) of Loan Facilities available to The Respondents in the Past Five Years

Estimated Amount (Naira) benefited Over the Years	2012		2013		2014		2015		2016	
	Freq. n=864	% (100)	Freq. n=864	% (100)	Freq. n=864	% (100)	Freq. n=864	% (100)	Freq. n=864	% (100)
1 Less than ₦ 100,000	368	42.59	254	29.39	261	30.20	163	18.86	151	17.47
2 ₦ 100,001 – ₦ 500,000	421	48.72	466	53.93	337	39.00	351	40.62	234	27.08
3 ₦ 500,001 – ₦ 1,000,000	73	8.44	118	13.65	203	23.49	225	26.04	323	37.38
4 ₦ 1,000,001 – ₦ 2,000,000	02	0.231	21	2.430	51	5.902	110	12.73	132	15.27
5 ₦ 2,000,001 – ₦ 5,000,000	--	--	05	0.578	12	1.388	15	1.736	24	2.777
6 ₦ 5,000,001 – ₦ 10,000,000	--	--	--	--	--	--	--	--	--	--
7 Above ₦ 10,000,000	--	--	--	--	--	--	--	--	--	--
Average (x) Values	₦200,200.25		₦274,000.4		₦769,800.6		₦999,400.69		₦1,204,000.7	

Source: Field Survey July, 2017

Table 20: Summary of Mean (x) Scores Obtained from the Responses (Available Data) based on the Influence of Collective Innovative Training Acquired by the Members on their Access; Usage and Quantity of Loan Facilities

S/N	Mean (x) Scores for Innovative training	Mean (x) Scores for Access to Loan	Mean (x) Scores for Usage of Loan Facilities	Mean (x) Values for Quantity of Loan Accessed
1	3.6424	3.8474	2.4644	200,200.25
2	3.8644	3.4641	3.9771	274,000.4
3	4.5271	4.0231	3.0493	769,800.6
4	2.2093	3.6062	4.7685	999,400.69
5	3.8685	3.4640	3.1524	1,204,000.7
6	3.4424	3.6429	3.1491	--
7	2.8093	4.2344	3.9861	--
Grand Mean (x) Values	3.4571	3.714	3.0845	₦689,480.5

Source: Field Survey July, 2017

Sub section 4.3 presented results on the extent which collective innovative training (y) influences financial inclusion (x) in terms of access; usage and quantity of loan facilities among members of CICSLS in Osun State. Table 20 presented the summary of mean scores of the data obtained from the respondents on Table 16; 17; 18; and 19 (collective innovative training and financial inclusion indicators (access; usage and quantity of loan facilities)) which was analyzed with scale analysis of five points with threshold of 3.0. Evidence from the summary result Table 20 showed that the majority ($x = 3.4571$) of the respondents agreed that they usually acquire various degree of innovative training from their cooperatives, as most of indices for innovative training mean scores were higher than the threshold of 3.0. Also, the financial indicators of access to loan facility has more mean scores ($x = 3.714$) that were higher than the threshold of 3.0; with an indication that majority of the respondents have access to loan facilities of their cooperative. Indication from the same result table revealed that the respondents regularly make use of the cooperative loan facilities; this was affirmed from the grand mean (x) score of **3.0845**. Finally, the average value of **₦689,480.5** revealed that the respondent received reasonable amount of loan from their cooperative society which is enough to invest on innovative enterprise on a smaller scale.

Table 21: Partial Correlation Output Of The Variables That Determine The Relationship Between Collective Innovative Training Acquired By The Members And Access; Usage And Quantity Of Loan Facilities

Variables	Mean	Std. Deviation	N
Innovation	3.9091	1.26058	7
Access	2.7562	1.24876	7
Usage	2.4924	1.44335	7
Quantity	3.0812	.74206	7

Source: Field Survey July, 2017

Table 22: Partial Correlation Output of the Variables that Determine the Relationship between Collective Innovative Training Acquired by the Members and Access to Loan Facilities

Control Variables			Innovation	Access
Usage & Quantity	Innovation	Correlation	1.000	-.953
		Significance (2-tailed)	.	.012
		df	0	3
Access	Access	Correlation	-.953	1.000
		Significance (2-tailed)	.012	.
		df	3	0

Source: Field Survey July, 2017

Table 23: Partial Correlation Output of the Variables that Determine the Relationship between Collective Innovative Training Acquired by the Members and Usage of Loan Facilities

Control Variables			Innovation	Usage
quality & access	innovation	Correlation	1.000	.433
		Significance (2-tailed)	.	.466
		df	0	3
usage	usage	Correlation	.433	1.000
		Significance (2-tailed)	.466	.
		df	3	0

Source: Field Survey July, 2017

Table 24: Partial Correlation Output of the Variables that Determine the Relationship between Collective Innovative Training Acquired by the Members and Quantity of Loan Facilities

Control Variables			Innovation	Quantity
access & usage	innovation	Correlation	1.000	.994
		Significance (2-tailed)	.	.000
		df	0	3
quantity	quantity	Correlation	.994	1.000
		Significance (2-tailed)	.000	.
		df	3	0

Source: Field Survey July, 2017

In order to determine and strengthen these result findings, the mean scores obtained from the result Table 20 were subjected to partial correlation and the results were presented in Tables 21; 22; 23 and 24. In result Table 22, collective innovative training (x) and access to loan facilities (y) were partially correlated at 5% level of significance. The result revealed that there exist strong relationship between y and x . But coefficient of partial correlation of $-.953$ implied that collective innovative training and access to loan facilities are inversely (negatively) related.

Result Table 23 presented the relationship between collective innovative (x) and usage of loan facilities (y) among cooperative members. Evidence from the result obtained revealed that the relationship that exist between the variable y and x with partial correlation coefficient of $.433$. Similarly, the probability (P) value of $.466$ implied that the variable y and x are not significantly related at 5% level of significance.

Result Table 24 presented partial correlation outputs for collective innovative training and financial inclusion indicator of quantity of loan facilities members obtained from the cooperatives in Osun State. From the result Table, evidence revealed that, there is strong relationship between variable y and x ; that is, collective innovative training and quantity of loan facilities members obtained from the cooperatives are significantly related since the probability (P) value of $.000$ is less than the threshold of $.05$ at 5% level of significance

Graphical Presentation for Partial Correlation Output of the Variables that Determine the Relationship between Collective Innovative Training Acquired by the Members and Access; Usage and Quality of Loan Facilities

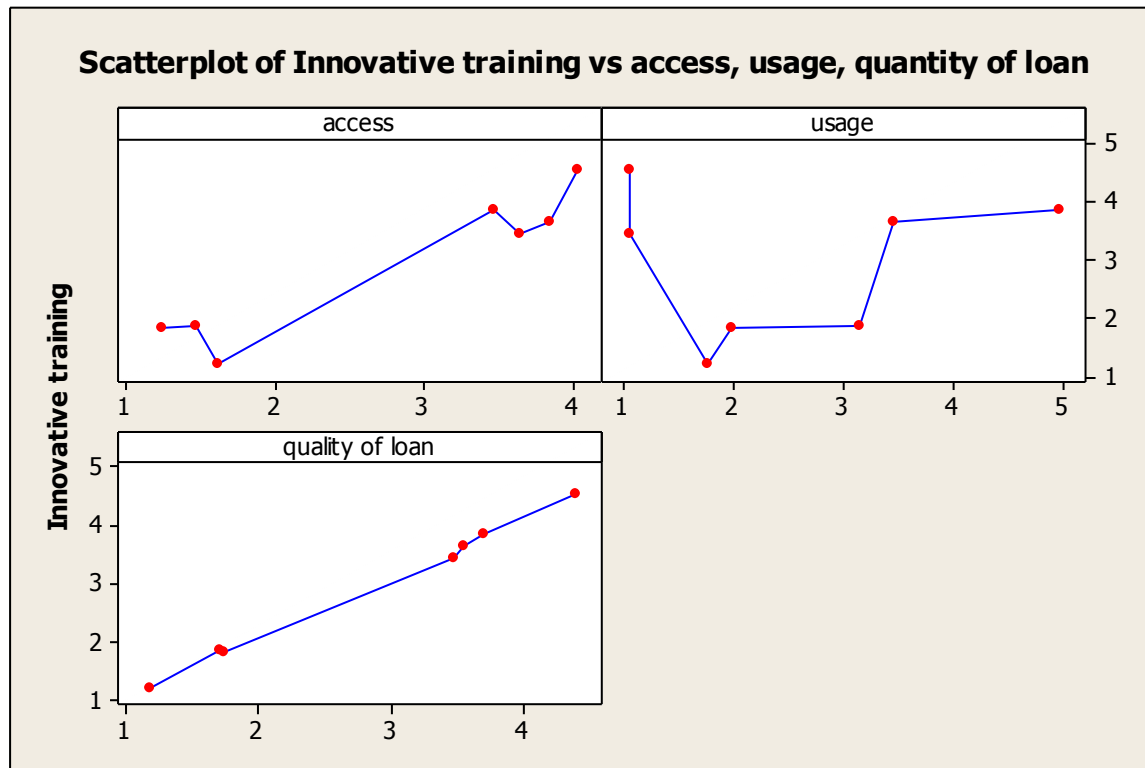


Figure 5: Scatter Plot of the Variables

Source: Field Survey July, 2017

The scatter lot graph in Figure 5 graphically presented the relationship that exists among the variables. The partial correlation outputs displayed on the graph showed that it is only quality of loan facilities that has straight line which stretched from y axis to the x axis. This implied that quantity of loan facilities has a linear relationship with innovative training while other financial inclusion indicators (access and usage) weak and negative with collective innovative training. In short, extent of innovative training members acquired from the CICS L influences the quantity of loan facilities in terms of estimated amount of loan obtained from the cooperative.

4.3.2: Test of Hypothesis Three (H_0_3)

H_0_3 : Innovative/creative business training of cooperative members has not significantly facilitates cooperative member's access; usage and quality of loan facilities in CICSL

H_0_3 : Innovative/creative business training of cooperative members has significantly facilitates cooperative member's access; usage and quality of loan facilities in CICSL

In order to strengthen the earlier result obtained data were subjected to multivariate linear regression and the coefficient results for hypothesis three (H_0_3) showed the extent collective innovative training influence financial inclusion indicators (access; usage and quality of loan facilities).

The hypothesis was tested using multivariate linear regression with innovation as dependent variable and other variables as dependent variables. Table 23 data were obtained from Mean (x) scores of the responses on the influence of collective innovative training acquired by the members on their access; usage and quantity of loan facilities

Table 25: Summary of Mean (x) Scores Obtained from the Responses (Available Data)

S/N	Innovative training (x)	Access to Loan (y ₁)	Usage of Loan Facilities (y ₂)	Quantity of Loan (y ₃)
1	3.6424	3.8474	3.4644	3.5502
2	3.8644	3.4641	4.9771	3.7000
3	4.5271	4.0231	1.0493	4.4049
4	1.2093	1.6062	1.7685	3.1831
5	3.8685	1.4640	3.1524	2.7049
6	3.4424	3.6429	1.0493	3.4831
7	1.8093	1.2344	1.9861	1.7424

Model

$$y_1 + y_2 + y_3 = \beta_0 + \beta_1 x + e_i$$

Where

x (Independent variable) is Collective Innovative Training,

y_1 ; y_2 & y_3 . (Dependent variables) is Financial Inclusion indicators (Access; Usage & Quantity)

Table 26: Hypothesis Three (Ho₃) Stata Software Output for Multivariate Regression Analysis Model ($Acc_1 + Usu_2 + Qua_3 = \beta_0 + \beta_i CIT$)

Equation	Obs	Parms	RMSE	"R-sq"	F	P
y ₁	7	2	.43283	0.8999	44.94321	0.0011*
y ₂	7	2	1.573321	0.0098	.0496399	0.8325
y ₃	7	2	.0802243	0.9966	1446.724	0.0000*

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
-----+-----					
y ₁					
x	-.9397298	.1401751	6.70	0.001*	.5793982 1.300061
cons	.0224724	.4393695	0.05	0.961	-1.106963 1.151908
-----+-----					
y ₂					
x	.1135236	.5095312	0.22	0.833	-1.196268 1.423315
cons	2.162196	1.597091	1.35	0.234	-1.943258 6.26765
-----+-----					
y ₃					
x	.9882166	.0259812	38.04	0.000*	.9214298 1.055003
cons	-.0506927	.0814363	-0.62	0.561	-.2600315 .158646
-----+-----					

Model Interpretation: $Acc_{0.8999} + Usu_{0.0098} + Qua_{0.9966} = \beta_0 + \beta_i CIT$

The multivariate linear regression coefficient Table 24 results showed the extent collective innovative training influence financial inclusion. Independent variable (x) is the collective innovative training the CICS rendered to their members while the dependent variables ($y_1; y_2$ & y_3) are the financial inclusion indicators (access; usage and quantity of loan facilities). The multivariate regression coefficient (R^2) of y_1 (Access) was **0.899**, while the coefficient of

independent variable (x) for $y_1 = -.9397298$. The implication of this result is that there is negative but strong relationship between the two variables (x & y_1). By indication x is capable of influencing y_1 negatively. Therefore, R-Square of **0.8999** is considered being very strong which implied that the independent variable (Collective Innovative Training) explain 89.9% fluctuations or changes in member's access to loan facilities (dependent variable). That is, the model explained 89.9% variation in member's access to loan facilities. That is, member's variation in access to loan facilities can be influenced by 89.9% through innovative training acquired from their cooperatives. Contrarily, the coefficient of independent variable implied that, 1 unit increase in collective innovative training will reduce member's access to loan facilities in CICSLS by **-.9397298**.

The R square for y_2 (usage of loan facilities) = **0.0098** which is very weak and the Probably (P) value of **0.8325** is higher than conventional threshold of 0.05. By indication the independent variable can only explain 0.0098 variations in dependent. Equally, the model is not significant since its P-value is higher than 0.05.

Also, the R^2 value of y_3 (Quantity of loan facilities) is **0.9966** which implied that the collective innovative training (x) can explain 99% variation in quantity of loan facilities obtained by the members (y_3). The coefficient of independent ($x = .9882166$) variable indicated that one unit increase in collective innovative training will enhance the quality of loan facilities by **.9882166**. Then the probability (P) value of **0.000** indicated that the model is significant at 5% level of significance.

Based on the evidence presented above the researcher concluded that collective innovative training has significance influence on the financial inclusion indicators especially the access to loan facilities and quality of loan facilities. There was sufficient evidence to reject the null hypothesis while the alternate hypothesis was accepted. There was sufficient evidence to conclude that the quantity (amount) of loan facilities obtained by the members has a strong and positive relationship with collective innovative training.

Based on the evidence presented above the researcher concluded that collective innovative training has significance influence on the financial inclusion indicators most especially the quantity of loan facilities and this further strengthen the earlier results.

In a similar result by Onaolapo & Odetayo (2012), they affirmed that access to financial services by the people and group of persons are prerequisite for employment; poverty reduction and social cohesion. But their study did not link collective entrepreneurship with access to financial services among the people. In a similar version Chagwiza, *et.al*,(2011), established the fact that training in various innovations is part of collective entrepreneurship but their work failed to link how innovative training can enhance financial inclusion.

4.4.1 The Nature of Relationship between Social Capital and Members Usage and Quantity of Savings in CICSL

Table 27: The Distribution of Responses Based on the Extent of Social Capital among the Members of CICSL

S/N	Indices for Social Capital in CICSL	Mean (x)	Implication
i	Solidarity support fund for the Burial of member and members close relatives	3.3617	Great Extent
ii	Mutual aid fund for members educational development and scholarship	4. 2081	Great Extent
iii	Solidarity support fund for naming and dedication of members new born	3.6352	Great Extent
iv	Solidarity support fund for bodily injury caused by accident or ill health of any member	3.2665	Great Extent
v	Mutual aid fund for property loss or damage due to natural and artificial disaster	3.6702	Great Extent
vi	Solidarity support for the wedding ceremony of member	3.8185	Great Extent
vii.	Social responsibility fund to show concern for the community e.g provision of borehole water; renovation of schools, donation of equipments; and financial assistance to the needy in the community.	3.7574	Great Extent

Source: Field Survey July, 2017

***Grand Mean (x) =3.628**

Table 28: Distribution of Responses on Usage of Savings Facilities in the Cooperative and its Relationship with Social Capital in CICSL

S/N	Indicators for the Usage of Savings Services in CICSL	Mean (x)	Implication
i	Making use of Savings facilities Daily	3.2644	Regularly Use
ii	Making use of Savings facilities Weekly	4.4201	Regularly Use
iii	Making use of Savings facilities Monthly	4.6092	Regularly Use
iv	Making use of Savings facilities Quarterly	2.2625	Rarely Use
v	Making use of Savings facilities Yearly (annually)	3.5422	Regularly Use
vi	Making use of Savings facilities at Will	2.8066	Rarely Use
vii.	Making use of Savings facilities Randomly	2.7422	Rarely Use

Source: Field Survey July, 2017

**Grand Mean (x) =3.3428*

Table 29: Distribution of Responses on the Quantity (Estimated Amount) of Respondents Savings in the Cooperative over Past Five Years and its Influence on Social Capital in CICSL

Estimated Amount (₦) Saved in CICSL	2012		2013		2014		2015		2016	
	Freq. n=864	% (100)	Freq. n=864	% (100)	Freq. n=864	% (100)	Freq. n=864	% (100)	Freq. n=864	% (100)
1 Less than ₦ 100,000	509	58.91	411	47.56	112	12.96	84	9.722	52	6.018
2 ₦ 100,001 – ₦ 500,000	226	26.15	301	34.83	340	39.35	280	32.40	154	17.82
3 ₦ 500,001 – ₦ 1,000,000	114	13.19	122	14.12	161	18.63	296	34.25	361	41.78
4 ₦ 1,000,001 – ₦ 2,000,000	15	1.73	26	3.00	41	4.745	157	18.17	231	26.73
5 ₦ 2,000,001 – ₦ 5,000,000	--	--	04	0.462	12	1.388	35	4.050	48	5.555
6 ₦ 5,000,001 – ₦ 10,000,000	--	--	--	--	06	0.694	12	1.388	18	2.083
7 Above ₦ 10,000,000	--	--	--	--	---	--	--	--	--	--
<i>Average (x) Values</i>	<i>₦184,375.29</i>		<i>₦510,700.45</i>		<i>₦628,083.80</i>		<i>₦1,263,917.31</i>		<i>₦1,615,084.01</i>	

Source: Field Survey July, 2017

Table 30: Summary of the Available Data on the Nature of Relationship between Social Capital and member's Usage and Quantity of Savings

S/N	Mean (x) Scores for Social Capital	Mean (x) Scores for Member Usage	Mean (x) Values for Quantity of Saving in Naira Per Annum
1	3.3617	3.2644	184,375.29
2	4.2081	4.4201	510,700.45
3	3.6352	4.6092	628,083.80
4	3.2665	2.2625	1,263,917.31
5	3.6702	3.5422	1,615,084.01
6	3.8185	2.8066	--
7	3.7574	2.7422	--
Grand Mean (x) Values	3.628	3.3428	₦840,432.172

Source: Field Survey July, 2017

The Table 27 displayed the responses of the respondent based on the extent of social capital in the cooperative society. The above result was deduced from five points scale analysis of Likert with threshold of 3.0. Evidence from the result table revealed that all (**Grand Mean (x) = 3.628**) the social capital indicators have mean (x)scores above the threshold of 3.0 with indication that the extent of social capital among the members of cooperative society is very high.

The result on Table 28 also revealed how often the cooperative members make use of savings. Based on the evidence (**Grand Mean (x) Values = 3.3428**) from the result table, it was revealed that the cooperative members regularly make use of the savings facilities usually on weekly basis (4.6092). Finally, the average value of **₦840,432.172** indicated that the respondents have saved reasonable amount of money over the years.

Output

Table 31: Correlations Matrix: Social Capital, member Usage, quality of saving

	<i>Social Capital</i>	<i>Member Usage</i>
<i>Member Usage</i>	0.969 0.000	
Quantity of Saving	0.980 0.000	0.966 0.000

Cell Contents: Pearson correlation

P-Value

Based on the correlation matrix in Table 31, the result presented the nature of relationship that exist between social capital and financial inclusion indicators of usage and quantity of saving among members of CICS L. The result emanated from the correlation matrix table 29 revealed that social capital has strong positive relationship with financial inclusion, in terms of member usage of saving facilities with P-value (*0.000*) less than 0.05 which shows that the correlation value is significant. Also, the relationship between social capital and quantity of savings is strong positive. Member usage and quantity of saving has a positive and strong relationship with the social capital.

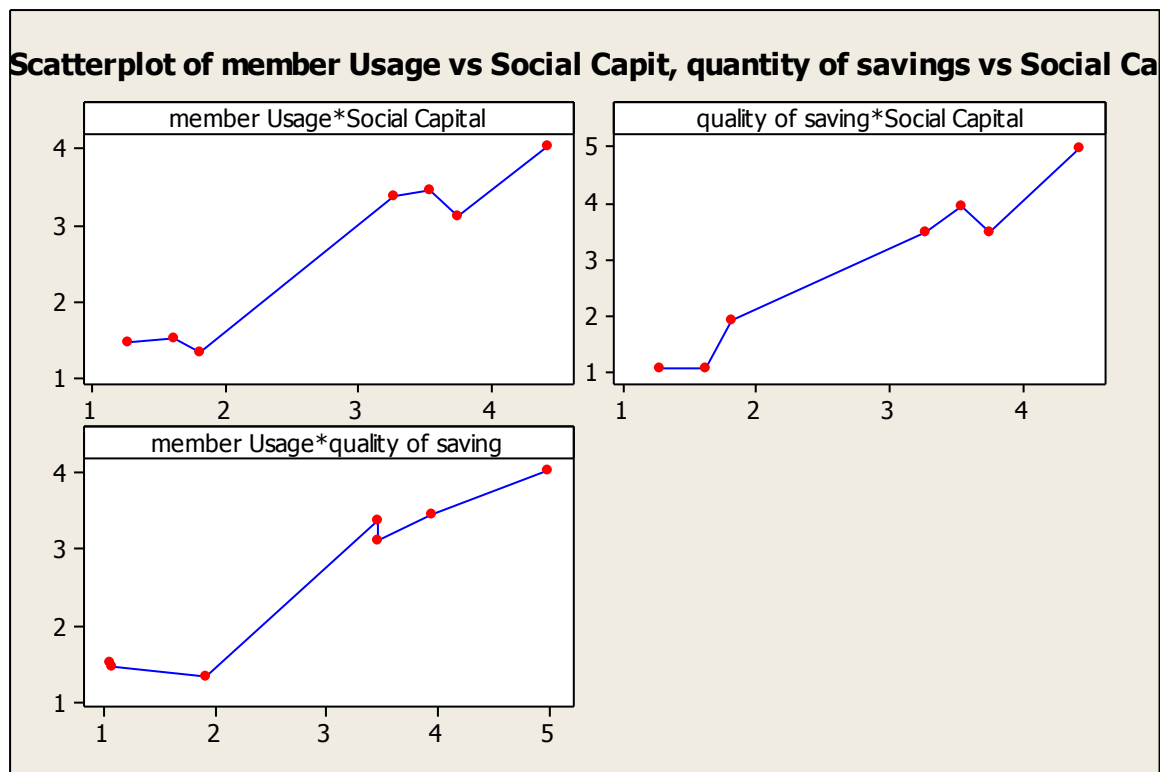


Figure 6: Scatter plot of the variables Graphical Presentation showing the extent of relationship that exist between social capital, members usage of savings facilities and quality of savings

Source: Field Survey July, 2017

4.4.2: Test of Hypothesis Four (H_{04})

H_{04} : Social capital has no significant effectson member’s savings usage and quality of savings in CICSL.

H_{04} : Social capital has significant effectson member’s savings usage and quality of savings in CICSL.

For the determination of the existence of significant relationship among variables with one dependent variable and more than one independent variables, multiple linear regression was used and the Available Data on the Responses for Nature of Relationship between Social Capital and Financial inclusion (member’s Usage and Quality of Savings) were obtained from Table 4.13

Table 32: Summary of the Available Data

S/N	Social Capital (<i>x</i>)	Member Usage (<i>y₁</i>)	Quality of Saving (<i>y₂</i>)
1	3.3617	3.2644	184,375.29
2	4.2081	4.4201	510,700.45
3	3.6352	4.6092	628,083.80
4	3.2665	2.2625	1,263,917.31
5	3.6702	3.5422	1,615,084.01
6	3.8185	2.8066	--
7	3.7574	2.7422	--

Model

$$y_1 + y_2 + y_3 = \beta_0 + \beta_1 x + e_i$$

Where

x (Independent variable) is Collective Ownership of an Enterprise,

y₁&y₂. (Dependent variables) is Financial Inclusion indicators (Usage & Quality)

Table 33: Hypothesis Four (Ho₄) Stata Software Output for Multivariate Regression Analysis Model ($Usu_1 + Qua_2 = \beta_0 + \beta_1 CSC$)

Equation	Obs	Parms	RMSE	"R-sq"	F	P
y1	7	2	.3034888	0.9395	77.69394	0.0003*
y2	7	2	.3287494	0.9608	122.671	0.0001*

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
-----+-----					
y1					
x	.8893941	.1009022	8.81	0.000	.6300167 1.148771
cons	.1106984	.3057715	0.36	0.732	-.6753122 .896709
-----+-----					
y2					
x	1.210582	.1093007	11.08	0.000	.9296152 1.491548
cons	-.5591073	.3312221	-1.69	0.152	-1.410541 .2923263
-----+-----					

Model Interpretation: ($Usu_{.889394} + Qua_{1.210582} = \beta_0 + \beta_1 CSC$)

The multivariate regression coefficient table results show that the independent variable (x = social capital) have positive relationship with the dependent variables (y_1 =usage f savings facilities and y_2 = quantity of savings facilities). The coefficient of independent variable (x) is **.8893941** for y_1 and **1.210582** for y_2 .

Therefore, R-Square of **0.9395** for y_1 (usage of savings facilities) is considered being very strong and this implies that the social capital (independent variable) influence 93% of the variation in the usage savings facilities among members of CICSL. That is, one unit change in social capital will cause 93% of increase in the usage of savings facilities among cooperative members. Similarly, R-Square of **0.9608** for y_2 (quantity of savings facilities) is also considered being very strong and this implied that the social capital (independent variable) influence 96% of the variation in the quantity of savings facilities among members of CICSL. That is, one unit change in social capital will cause 96% of increase in the quality of savings facilities available to cooperative members.

However, probability (P) value ($y_1 = 0.0003$ & $y_2 = 0.0001$) from the model result showed that the model is significant since the P Value of the independent variables ($y_1 = 0.0003$ & $y_2 = 0.0001$) is less than the conventional threshold of 0.05. Conclusively, there was sufficient evidence to reject the null hypothesis while the alternate hypothesis was accepted. That is, the social capital has significant effect on member's savings usage and quantity of savings in CICSL.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

This section is divided into three sub-sections. The first sub-section is focused on summary of major findings obtained from the results. Conclusion was made in the second sub-section, while the third sub-section is concerned with making recommendations from the findings.

The study ascertain the relationship and influence of collective entrepreneurship model on financial inclusion among members of Cooperative Investment and credit Societies Limited (CICSL) in Osun State. Results from the data analyzed were discussed and some findings were revealed. Based on these findings revealed conclusion was reached and robust policy implications were made that will enhance financial inclusion through collective entrepreneurship model in cooperative organizations.

5.1 Summary of Findings

The findings revealed from the results are summarized as follows:

5.1.1 The result of the analysis presented revealed that there is a side by side increment in the amount of money invested by the members in risk sharing enterprise and usage of savings facilities among cooperative members. The correlation coefficient of **0.74** implied amount invested in collective risk sharing has positively strong relationship with how often the members use savings facilities of CICSL. Similarly, the hypothesis one (H_{o1}) results further strengthen the result findings and affirmed that there is positive (**0.048**) relationship. Then, coefficient of determination (R^2) of the model in the regression result for H_{o1} was **0.793441** which showed the percentage of fluctuation in the variables That is, **79.3%** fluctuation in the usage of savings facilities among cooperative members can be explained by the estimated amount of money they invested in collective risk sharing. In this case, the amount cooperative members invested in collective risk sharing enterprise are capable of influencing their financial inclusion in terms using savings facilities regularly.

5.1.2 Findings from the nature of relationship that exist between collective ownership; and financial inclusion indicators of access; usage and quality of loan revealed that, there is existence of weak and negative (- 463) relationship between collective ownership of enterprise and

members access to facilities of CICS L. This implied that cooperative member's joint or collective ownership of enterprises has nothing to do with their financial inclusion indicator of access to loan facilities. Evidence from the result also revealed that correlation coefficient **.857** with the probability (P) value of **0.024** indicated that there is strong evidence that positive relationship exist between collective ownership of enterprise and how often or how many times the cooperative members use loan facilities of the CICS L. While the correlation coefficient of **-.121** indicated that there is existence of weak and negative relationship between collective ownership of enterprise and the quality (amount) of loan facilities.

The hypothesis two (**H₀₂**) result further consolidated the findings as it was revealed that the collective ownership of enterprise indicators have positive relationship with the usage of loan facilities since the probability (**P value = 0.0001**) value is less than 0.05, and the coefficient of collective ownership of enterprise **H₀₂** was **.982867**. That is, usage of loan facilities is the only financial inclusion indicator that has positive and strong ties with the collective ownership of cooperative enterprise.

5.1.3 Evidence on the extent which collective innovative training influences financial inclusion in terms of access; usage and quality of loan facilities among members of CICS L in Osun State revealed that the majority (**x = 3.9091**) of the respondents agreed that, they usually acquire various degree of innovative training from their cooperatives, as most of indices for innovative training mean scores were higher than the threshold of 3.0. Also, the financial inclusion indicators of quality of loan facility has more mean scores (**x = 3.0812**) that was higher than the threshold of 3.0, with an indication that quality of loan may be influenced by collective innovative training. Evidence from the partial correlation outputs for collective innovative training and financial inclusion indicator of quality of loan facilities revealed that, there is strong relationship between variable **y** and **x**; that is, collective innovative training and quality of loan facilities members obtained from the cooperatives are significantly related since the probability (P) value of **.000** is less than the threshold of .05 at 5% level of significance.

In order to strengthen the finding, multivariate linear regression and the coefficient results for hypothesis three (**H₀₃**) revealed the extent collective innovative training influence financial

inclusion indicators (access; usage and quality of loan facilities). The multivariate regression coefficient (R^2) access to loan facilities was **0.8999** while coefficient of collective innovative training was **-0.9397298**. The implication was that there is negative but strong relationship between collective innovative training. But R square for usage of loan facilities was **0.0098** which is very weak and the Probability (P) value of **0.8325** was higher than conventional threshold of 0.05. While R^2 value of quality of loan facilities was **0.9966** which implied that the collective innovative training (x) can explain 99% variation in quality of loan facilities obtained by the members. The coefficient of independent ($x=0.9882166$) variable indicated that one unit increase in collective innovative training will enhance the quality of loan facilities by **0.9882166**. In summary, the collective innovative training only has significant influence on financial inclusion but among all the indicators of financial inclusion, it was the quality of loan that can strongly and positively influence.

5.1.4 Finally, the revealed the nature of relationship that exist between social capital and financial inclusion indicators of usage and quality of saving among members of CICSLS. The evidence emanated from the correlation matrix result revealed that social capital has strong positive relationship with financial inclusion, in terms of member usage of saving facilities with P-value (**0.000**) less than 0.05 which shows that the correlation value is significant. Also, the relationship between social capital and quality of savings is strong positive. That is, member usage and quality of saving has a positive and strong relationship with the social capital.

The multivariate regression coefficient for hypothesis four (H_{04}) results revealed that the social capital has positive relationship with the usage of savings facilities and quality of savings facilities. The coefficient of social capital was **0.8893941** for usage and **1.210582** for quality of savings facilities. R-Square of **0.9395** for usage of savings facilities was considered being very strong and this implies that the social capital influence 93% of the variation in the usage savings facilities among members of CICSLS. Similarly, R-Square of **0.9608** for quality of savings facilities was also considered being very strong and this implied that the social capital influence 96% of the variation in the quality of savings facilities among members of CICSLS.

5.2 Conclusion

The collective entrepreneurship model in cooperative society has really proven to have linear and positive strong relationship with financial inclusion. Collective entrepreneurship is an intrinsic part of cooperative society as it provides an opportunity for the members to jointly or collectively own an innovative and productive enterprise with the risks and benefits accrued from such an enterprise proportionately shared, based on what the members must have contributed. Also, collective entrepreneurship is capable of improving financial inclusion among the cooperative members because it gives a platform to access and use financial services and products as well as enhances the quality of financial services and products.

Collective entrepreneurship can be better achieved in cooperative society as cooperative identity (cooperative principles; cooperative definition and cooperative values) gave a strong backing for the adoption and practice of collective entrepreneurship model in cooperative society. For instance, atoms of collective entrepreneurship can be found in the ICA (1995) definition of cooperative which was defined as autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through jointly owned and democratically controlled enterprise. The jointly owned enterprise is referring to collective ownership of an enterprise which is an intrinsic component or indicator of collective entrepreneurship. Then cooperative values honesty; equality self help; solidarity etc also reflected the essence collective entrepreneurship in cooperative. While the cooperative principle of member economic participation and education; training and information also replicate collective creative and innovative training which also a component of collective entrepreneurship.

The reason for anybody to join or establish cooperative society is to promote their economic and social well-being and this goal or interest will collectively share by every member of that cooperative society. In this case collective entrepreneurship in cooperative society is very vital to financial inclusion.

5.3 Recommendations

Based on the findings obtained from the study it is pertinent to proffer recommendations that will use to enhance financial inclusion through the collective entrepreneurship in cooperative society. As a result of this the policy implications are considered necessary;

5.3.1 Since there is existence of positive and strong relationship between collective risk sharing and financial inclusion (usage of financial services). The cooperative should endeavour to design more flexible financial services and products that will focus on access; usage and quality of savings among members. Through this, the cooperative society will be able to mobilize enough capital from members savings which can be invested in collective enterprises especially the innovative enterprises or any other productive purposes which the members will share the risks and benefits attached to such business enterprise. Designing more flexible financial services and products will equally give the members more opportunity to have variety of savings facilities which is capable of enhancing their accessibility; regular usage and quality of financial services.

5.3.2 As collective ownership of enterprise strongly influenced the financial inclusion especially the usage of loan facilities. Then the cooperative members should jointly pool their resources together so as to diversify their investments and identify the innovative business enterprises that are economically viable. This will enable the cooperative society to have multiple sources of income (surpluses). This will also facilitate financial inclusion among members especially access to loan facilities; and regularly use of financial products and services as well as the quality of financial services.

5.3.3 As a matter of necessity, the cooperative should try as much as possible to invest more on creativity and innovative business training of their members. This will not only enhance their skills and knowledge but it will facilitate their access; usage and quality of financial services and products. The more innovative training and skills members acquired, the more they will be financially included.

5.3.4 Finally, as a matter of urgency, the apex regulatory body of cooperative in Nigeria should embark on re-orientation and sensitization programme on the need and benefits for all the cooperative societies across the nation to adopt collective entrepreneurship model. If

cooperatives in Nigeria should key into collective entrepreneurship, it will not only enhance member's sense of financial inclusion, but also will enhance economic and social inclusion among the cooperative members across the country. This will also provide the cooperative members the opportunity of pooling their resources together for innovative, creative and viable enterprises which all members will share ownership, risks and benefits together.

5.4 Contributions to the Knowledge

Over the years, both concepts of collective entrepreneurship and financial inclusion have been separately studied without single effort to establish significant relationship between the two concepts. The researcher was able to identify this existing gap and determined to bridge this gap with this work. This study establishes a link between collective entrepreneurship and financial inclusion among members of cooperative societies in Osun State.

The study was able to contribute to the knowledge based on the evidence from the results that revealed the strong and positive link between collective entrepreneurship and financial inclusion. As such, this study provide empirical evidence for future researchers who might have interest to further strengthen the work based on the same subject of the matter. Also, the major part of this study will be used as literature review by future studies relating to the subject of the matter.

The study also contributed to knowledge as the findings and recommendations from this study will be used to enhance the financial inclusion through collective entrepreneurship model in cooperative societies.

5.5 Suggestions for Future Research

This current study was conducted to establish a link or relationship between collective entrepreneurship and financial inclusion but there are other vital areas in which the study did not cover. So in order to enhance and strengthen the relationship that exist between collective entrepreneurship and inclusion the following area are suggested for those who wish to do a study on collective entrepreneurship and inclusion.

The area of study should be widening to cover other state of the federation, this enable the researcher to compare the result of this current and future research.

In this study, financial inclusion was studied from demand approach. The future research should focus on supply approach of financial inclusion this will enable us to determine the nature and extent of relationship that exist between collective entrepreneurship and financial inclusion indicators from the perspective of financial products and financial services providers like deposits money banks and Micro finance banks.

The future research should also consider studying other type of cooperative societies like agricultural cooperatives, multipurpose cooperative consumer, producer etc so as to establish a relationship between collective entrepreneurship and financial inclusion in such cooperative and compare the result with the existing result.

Finally, the future research should also focus their study on collective entrepreneurship and economic inclusion and social inclusion and determine the extents and nature of relationship that exist between them.

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Appendix 1

Department of Cooperative Economics and
Management,

Nnamdi Azikiwe University,

Awka.

Dear Respondent,

LETTER OF INTRODUCTION

Cooperative greetings, I am a PhD candidate of the above named institution conducting a research work on the topic “**Collective Entrepreneurship model and Financial Inclusion among Members of Cooperative Investment and Credit Society Limiteds in Osun state**”for the award of PhD Degree in Cooperative Economics and Management.

The research work is purely for academic purpose and your accurate information will give a credit to the work. All information will be treated with utmost secrecy and no personal implication.

Thanks for your cooperation.

Yours faithfully,

Taiwo, OlabisiAbdulahi

2014437002P

Appendix 2

QUESTIONNAIRE

Instruction: Tick (√) as appropriate that will suit your opinion.

SECTION A: Socioeconomic Characteristics of the Respondents

- 1) **Gender of the Cooperative members:** a). Male [] (b). Female []

- 2) **Age Bracket:** (a). 18 – 30years [] (b). 31 – 50years [] (c).51 – 70years []
(d). 71years and above []
- 3) **Marital Status:** (a). Single [] (b). Married [] (c). Widow [] (d) Widower []
- 4) **Household Size:** (a). 2 – 5 [] (b). 6 – 10 [] (c). 11 – 15 [] (d). 16 – 20 []
(e). 21 and above []
- 5) **Years of Formal Education:** (a) Zero years of formal education [] (b).1year – 6 years []
(b). 7 – 9years [] (c) 10 – 12years [] (d) 13 – 16years [] (d) 17 – 20years
- 6) **Cooperative Membership Experience (Years):**(a).Below 1 year []
(b). 1 year - 5 years [] (c) 6 – 10years [] (d). 11 – 15years [] (e). 16 – 20years []
(f). 21years and above []
- 7) **Years ofMembers Enterprise Existence:** (a).Less than 1 years [] (b). 1 – 5years []
(c).6 – 10years [] (d).11 – 15years [] (e). 16 – 20years [] (f).Above 21years []
8. **Members Sources of Fund to Finance their Enterprise:**
(a).Cooperative Society []
(b). Loan from Deposit Money Bank []
(c). Loan from Bank of Industry []
(d). Personal Savings []
(e). Loan from Family and Friends []
(f) State government grant []
(g) Loan from micro finance bank []
(h) Loan from Bank of agriculture []
(i) Grant and loan from international agencies []
9. **Enterprise Estimated Capital Outlay Invested:**
a). Less than N100, 000 []
(b). N100, 000 – N500, 000 []
(c).N500, 001 – N1, 000, 000 []

- (d) N1, 000, 001 – N2, 000, 000 []
 (e) N2, 000, 001 – N5, 000, 000 []
 (f) N5, 000, 001 – N 10,000,000 []
 (g) N10, 000, 001 – N50, 000, 000 []
 (h) Above N50, 000, 000 []

Economic Activities of the Members Enterprise

- (a) Production of Consumer goods (manufacture) []
 (b) Agric business & Agro processing []
 (c). Trading i.e buying and selling []
 (d).Craftsmanship []
 (e).Service deliverye.g tailoring, saloon; dry cleaning & laundry []
 (f) Entertainment & Sport []
 (g) IT Engineering & Telecommunication e.g call center, cyber café, computer & phone repairer []
 (h) Transportation e.g KEKE (tricycle) & mini bus operator []
 (i) Construction & Real estate []

10. Estimated Income per Annum (₦) from Members Enterprise:

- (a).Less than ₦200, 000 []
 (b). ₦201, 000 – ₦500, 000 []
 (c). ₦501, 000 – ₦1million []
 (d). ₦1.1million – ₦2million []
 (e). N2.1million – ₦5million []
 (f). ₦5.1million and above []

12.Size of member Business Enterprise:

- (a). Large scale []
 (b). Medium Scale []
 (c) Small Scale []

SECTION B: Estimated amount of money members invested in joint risk enterprise of cooperative investment and credit cooperative society over last financial year and it's Influence on members Usage of Savings Facilities.

- (i) **Based on your experience in collective entrepreneurship in your cooperative society, what is the estimated amount of money you have invested so far in the joint ownership**

of your society's business or projects? Choose from the estimated amount of money provide in the table below that best represents your opinion.

Estimated Amount (₦) Invested on Joint Risk Enterprise		2012	2013	2014	2015	2016
1	Less than ₦ 100,000					
2	₦ 100,001 – ₦ 500,000					
3	₦ 500,001 – ₦ 1,000,000					
4	₦ 1,000,001 – ₦ 2,000,000					
5	₦ 2,000,001 – ₦ 5,000,000					
*	₦ 5,000,001 – ₦ 10,000,000					
**	Above ₦ 10,000,000					

(ii). If you should consider the influence of the estimated amount of money you have invested so far in the joint risk ventures of your cooperative society, how often do you make use of saving facilities of your cooperative?

S/N	Indicators for the Usage of Savings Services in CICSL	Regularly Use	Rarely Use	Sometimes Use	Not Sure	Not Use at all
6	Making use of Savings facilities Daily					
7	Making use of Savings facilities Weekly					
8	Making use of Savings facilities Monthly					
9	Making use of Savings facilities Quarterly					
10	Making use of Savings facilities Yearly (annually)					
11	Making use of Savings facilities at Will					
12.	Making use of Savings facilities Randomly					

SECTION C: The Influence of Collective Ownership of Cooperative Enterprises on Members Access, Usage and Quality of Loan Facilities in CICSL;

i. From the under listed enterprises/investments of the CICSL, to what extent do you jointly owned and operate the enterprises with other cooperative members?

S/N	Jointly Owned Enterprise Indicators	To a very great extent	To a great extent	To some extent	To a low extent	To a very low extent

13	Farm/agricultural enterprise e.g fish farm, livestock farm, farm produce processing, farm equipment hiring; cash crop farm; plantain & potatoes chip; processing & packing of garri; fufu; beans; amala; etc					
14	Hiring of event and ceremony equipments and materials like canopy; chairs; tables; cooling van & refrigerator; cooking utensils; coolers; DJ equipment; speaker; etc					
15	Consumer and Trading shop e.g food stuff & provision store; cement business; stationeries shop; wood & plank business; plumbing materials shop; spare parts & tire shop; electronics & electrical shop; etc					
16	Housing & estate management and land business e.g construction; renting and selling of shops; rooms; flats and duplex; buying and selling of plots of land to members and non members; etc					
17	Manufacturing and production of goods and services like block industry; sachet pure water production; laundry & dry cleaning services; printing press services; paint production; etc					
18	Transportation services e.g sale; hiring and higher purchase services of bus, car, tricycle, motorcycle; shuttle bus etc					
19.	Oil & gas business e.g Filling station business; engine oil sales; cooking gas refill & sales etc					

ii. Based on your involvement in joint enterprise of your CICSL has that influence your Access to Loan services of the cooperative

S/N	Access to Loan Facilities Indices	Very Highly Accessible	Somehow Accessible	Rarely Accessible	Not Accessible	Highly Not Accessible
20	CICSL Timely availability and approval of loan applications					
21	Approval of exact amount of loan on the members application form without reducing the amount					

22	Attractive and moderate interest rate attached to loan					
23	Direct disbursement of credit to members bank account as against cash payment					
24	Flexible repayment method & pattern					
25	little or no stress in filling the loan application form					
26.	Timely disbursement of loan to members after the approval					

iii. Has your involvement in collective or joint enterprise of CICSL influenced your Usage of Loan Facilities of the cooperative

S/N	Indicators for the Usage of Loan facilities	Regularly Use	Rarely Use	Someti mesUse	Not Sure	Not Use at all
27	Making use of Loan facilities Monthly					
28	Making use of Loan facilities Quarterly					
29	Making use of Loan facilities Bi annual (Twice yearly)					
30	Making use of Loan facilities Yearly (annually)					
31	Making use of Loan facilities once in 2 Years					
32	Making use of Loan facilities once in 3 Years					
33	Making use of Loan facilities only at time of urgent needs or issues					

iv. Has your involvement in collective or joint enterprise of CICSL influenced the Quality (Amount) of Loan Facilities available to you

	Estimated Amount (Quality in Naira) benefited over the years	2012	2013	2014	2015	2016
34	Less than ₦ 100,000					
35	₦ 100,001 – ₦ 500,000					
36	₦ 500,001 – ₦ 1,000,000					
37	₦ 1,000,001 – ₦ 2,000,000					
38	₦ 2,000,001 – ₦ 5,000,000					
39	₦ 5,000,001 – ₦ 10,000,000					
40	Above ₦ 10,000,000					

SECTION D: The effects of innovative/creative business training cooperative members received on their access; usage and quality of loan facilities in CICSL

i. What are the Innovative/creative business training you had received in past few years as a cooperative members which was organized by the CICSL?

S/N	Innovative/Creative Business Training Indicators	Regularly	Rarely	Sometimes	Not Sure	Not at all
41	Organize training for members to acquire innovative vocational skills					
42	Facilitates identification of innovative Business opportunities for the members e.g value chain opportunities in agric business					
43	Training on how to draft and write business plan and business proposal					
44	Leadership training and innovative training on how to relate with customers					
45	Innovative training on how to mobilize capital and finance members enterprise					
46	Innovative training on business management (planning, organizing; control etc) and credit management					
47	Training on innovative method of production with cost efficient					

ii. Based on the Innovative/creative business training you had received, does that influence your Access to Loan services of the cooperative

S/N	Access to Loan Facilities Indices	Very Highly Accessible	Somehow Accessible	Rarely Accessible	Not Accessible	Highly Not Accessible
48	CICSL Timely availability and approval of loan applications					
49	Approval of exact amount of loan on the members application form without reducing the amount					
50	Attractive and moderate interest rate attached to loan					
51	Direct disbursement of credit to members bank account as against cash payment					

52	Flexible repayment method & pattern					
53	little or no stress in filling the loan application form					
54	Timely disbursement of loan to members after the approval					

iii. Has Innovative/creative business training you had received influenced your Usage of Loan Facilities of the cooperative

S/N	Indicators for the Usage of Loan facilities	Regularly Use	Rarely Use	Sometimes Use	Not Sure	Not Use at all
55	Making use of Loan facilities Monthly					
56	Making use of Loan facilities Quarterly					
57	Making use of Loan facilities Bi annual (Twice yearly)					
58	Making use of Loan facilities Yearly (annually)					
59	Making use of Loan facilities once in 2 Years					
60	Making use of Loan facilities once in 3 Years					
61	Making use of Loan facilities only at time of urgent needs or issues					

iv. Has Innovative/Creative business training you had received from CICSL influenced the Quality (Amount) of Loan Facilities available to you

	Estimated Amount (Quality in Naira) benefited over the years	2012	2013	2014	2015	2016
62	Less than ₦ 100,000					
63	₦ 100,001 – ₦ 500,000					
64	₦ 500,001 – ₦ 1,000,000					
65	₦ 1,000,001 – ₦ 2,000,000					
66	₦ 2,000,001 – ₦ 5,000,000					
67	₦ 5,000,001 – ₦ 10,000,000					
68	Above ₦ 10,000,000					

SECTION E: The nature of relationship that exist between social capital and members usage and quality of savings in CICSL

S/N	Indices for social capital in CICSL	To a very great	To a great	To some	To a low	To a very low
-----	-------------------------------------	-----------------	------------	---------	----------	---------------

		extent	extent	extent	extent	extent
69	Solidarity support fund for the Burial of member and members close relatives					
70	Mutual aid fund for members educational development and scholarship					
71	Solidarity support fund for naming and dedication of members new born					
72	Solidarity support fund for bodily injury caused by accident or ill health of any member					
73	Mutual aid fund for property loss or damage due to natural and artificial disaster					
74	Solidarity support for the wedding ceremony of member					
75	Soicial responsibility fund to show concern for the community e.g provision of borehole water; renovation of schools, donation of equipments; and financial assistance to the needy in the community.					

ii. Do social capital in CICSL has any relationship with your Usage of Savings Facilities in the cooperative

S/N	Indicators for the Usage of Savings Services in CICSL	Regularly Use	Rarely Use	Someti mesUse	Not Sure	Not Use at all
76	Making use of Savings facilities Daily					
77	Making use of Savings facilities Weekly					
78.	Making use of Savings facilities Monthly					
79	Making use of Savings facilities Quarterly					
80	Making use of Savings facilities Yearly (annually)					
81	Making use of Savings facilities at Will					
82	Making use of Savings facilities Randomly					

iii. Has social capital in CICSL you had received from CICSL influenced the Quality (Amount) of your savings in the cooperative over past few years

	Estimated Amount (₦) Saved in CICSL	2012	2013	2014	2015	2016
83	Less than ₦ 100,000					
84	₦ 100,001 – ₦ 500,000					
85	₦ 500,001 – ₦ 1,000,000					
86	₦ 1,000,001 – ₦ 2,000,000					
87	₦ 2,000,001 – ₦ 5,000,000					
88	₦ 5,000,001 – ₦ 10,000,000					
89	Above ₦ 10,000,000					

Appendix3

Output for Data Analysis

Test-Retest Approach (Reliability of Respondent)

This is used to determine the reliability of the responses of respondents. The idea is a response is reliable if the respondent can repeat or present almost the same response as present in the past on the same scale or item.

The research tool was distributed twice to the same group of respondents. Product moment correlation was used to determine how close the responses are based on the number of times the research tool was distributed.

Reliability of Responses: (Correlation Analysis)

Correlation Matrix Using EVIEW Software

	First R	Second R
First R	1.000000	1.000000
Second R	0.985675	1.000000

The correlation value can be used to determine nature and strength of relationship between variables. Correlation value less than 0.5 is an indication of weak relationship but value greater than 0.5 implies strong relationship. If the value is negative, there exists inverse relationship between variables but positive correlation implies direct relationship. Correlation value of 1 implies perfect relationship but 0 implies spurious relationship. From the correlation matrix, the correlation between responses of the first set of research tool and the second set is 0.985675 which is positive and greater than 0.5. This can be interpreted as positive relationship and strong; strong positive relationship between the responses. In a layman's language, there exists strong relationship between the first responses and the second responses of the respondents. Since the correlation is positive, the responses of the respondents in the first set of the research tool are similar to the responses in the second set. Therefore, the responses are reliable and can be used for decision making.

Test of Consistency

Internal consistency which is as a result of higher variance among the items can be used to validate research tool. Based on literature, Cronbach's Alpha is a strong statistic for the test of consistency. Alpha value greater than 60% implies responses are reliable and consistency and alpha value less than 60% is an indication of weak or inconsistent responses.

Output

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	864	100.0
	Excluded ^a	0	.0
	Total	864	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
------------------	------------

Reliability Statistics

Cronbach's Alpha	N of Items
.852	89

Alpha value is 85.2% which is greater than 60%. This is an indication that the responses are reliable for decision making.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
VAR00001	238.3947	212.795	.035	.753
VAR00002	237.9306	210.002	.198	.651
VAR00003	237.3808	210.403	.091	.654
VAR00004	236.6759	196.669	.477	.745
VAR00005	235.9977	196.362	.422	.647
VAR00006	236.7384	209.278	.317	.649
VAR00007	236.2164	209.637	.302	.749
VAR00008	234.9537	213.029	.066	.652
VAR00009	238.8715	214.138	-.005	.652
VAR00010	238.1123	210.366	.293	.750
VAR00011	236.7384	209.278	.317	.649
VAR00012	238.8715	214.138	-.005	.752
VAR00013	236.7384	209.278	.317	.849
VAR00014	236.2164	209.637	.302	.849
VAR00015	234.9537	213.029	.066	.652
VAR00016	238.8715	214.138	-.005	.552
VAR00017	238.1123	210.366	.293	.650
VAR00018	236.7384	209.278	.317	.749
VAR00019	238.8715	214.138	-.005	.812
VAR00020	236.7384	209.278	.317	.849
VAR00021	236.2164	209.637	.302	.809
VAR00022	234.9537	213.029	.066	.812
VAR00023	238.8715	214.138	-.005	.842
VAR00024	238.1123	210.366	.293	.810
VAR00025	236.7384	209.278	.317	.809
VAR00026	238.8715	214.138	-.005	.752
VAR00027	236.7384	209.278	.317	.849
VAR00028	236.2164	209.637	.302	.649
VAR00029	234.9537	213.029	.066	.552
VAR00030	238.8715	214.138	-.005	.652
VAR00031	238.1123	210.366	.293	.750
VAR00032	236.7384	209.278	.317	.649
VAR00033	238.8715	214.138	-.005	.552
VAR00034	238.3947	212.795	.035	.653
VAR00035	237.9306	210.002	.198	.651
VAR00036	237.3808	210.403	.091	.754

VAR00037	236.6759	196.669	.477	.645
VAR00038	235.9977	196.362	.422	.647
VAR00039	236.6759	196.669	.477	.745
VAR00040	235.9977	196.362	.422	.647
VAR00041	236.7384	209.278	.317	.649
VAR00042	236.2164	209.637	.302	.649
VAR00043	234.9537	213.029	.066	.652
VAR00044	238.8715	214.138	-.005	.652
VAR00045	238.1123	210.366	.293	.750
VAR00046	236.7384	209.278	.317	.749
VAR00047	238.8715	214.138	-.005	.552
VAR00048	236.7384	209.278	.317	.649
VAR00049	236.2164	209.637	.302	.649
VAR00050	234.9537	213.029	.066	.652
VAR00051	238.8715	214.138	-.005	.652
VAR00052	238.1123	210.366	.293	.550
VAR00053	236.7384	209.278	.317	.749
VAR00054	238.8715	214.138	-.005	.652
VAR00055	236.7384	209.278	.317	.549
VAR00056	236.2164	209.637	.302	.549
VAR00057	234.9537	213.029	.066	.552
VAR00058	238.8715	214.138	-.005	.652
VAR00059	238.1123	210.366	.293	.550
VAR00060	236.7384	209.278	.317	.649
VAR00061	238.8715	214.138	-.005	.552
VAR00062	238.3947	212.795	.035	.653
VAR00063	237.9306	210.002	.198	.651
VAR00064	237.3808	210.403	.091	.554
VAR00065	236.6759	196.669	.477	.645
VAR00066	235.9977	196.362	.422	.547
VAR00067	236.6759	196.669	.477	.745
VAR00068	235.9977	196.362	.422	.747
VAR00069	236.7384	209.278	.317	.649
VAR00070	236.2164	209.637	.302	.549
VAR00071	234.9537	213.029	.066	.652
VAR00072	238.8715	214.138	-.005	.552
VAR00073	238.1123	210.366	.293	.650
VAR00074	236.7384	209.278	.317	.649
VAR00075	238.8715	214.138	-.005	.752
VAR00076	236.7384	209.278	.317	.749
VAR00077	236.2164	209.637	.302	.649
VAR00078	234.9537	213.029	.066	.652
VAR00079	238.8715	214.138	-.005	.552
VAR00080	238.1123	210.366	.293	.650
VAR00081	236.7384	209.278	.317	.649
VAR00082	238.8715	214.138	-.005	.652
VAR00083	236.7384	209.278	.317	.749
VAR00084	236.2164	209.637	.302	.649

VAR00085	234.9537	213.029	.066	.552
VAR00086	238.8715	214.138	-.005	.552
VAR00087	238.1123	210.366	.293	.550
VAR00088	236.7384	209.278	.317	.549
VAR00089	238.8715	214.138	-.005	.552

If-Item-deleted is used to determine the alpha value if a particular item is removed among the lot. The last column of the table shows alpha value. If the value is greater than 85.2%, then, the removal of such item will improve the alpha value or the consistency of the tool.

Considering the values, the removal of any of the items cannot lead to increase in the alpha value which implies all the items are necessary in the model.

Item Statistics for study objectives

	Mean	Std. Deviation	N
VAR00001	1.4861	.75031	864
VAR00002	1.9502	.64664	864
VAR00003	2.5000	1.01780	864
VAR00004	3.2049	1.19808	864
VAR00005	3.8831	1.34758	864
VAR00006	3.2424	.50201	864
VAR00007	3.7644	.48698	864
VAR00008	4.4271	.46226	864
VAR00009	1.8093	.09583	864
VAR00010	1.5685	.42202	864
VAR00011	3.4424	.50201	864
VAR00012	1.2093	.09583	864
VAR00013	3.6424	.50201	864
VAR00014	3.4644	.48698	864
VAR00015	4.8271	.46226	864
VAR00016	1.1093	.09583	864
VAR00017	1.6685	.42202	864
VAR00018	3.4424	.50201	864
VAR00019	1.8093	.09583	864
VAR00020	3.2424	.50201	864
VAR00021	3.8644	.48698	864
VAR00022	4.3271	.46226	864
VAR00023	1.2093	.09583	864
VAR00024	1.6685	.42202	864
VAR00025	3.9424	.50201	864
VAR00026	1.3093	.09583	864
VAR00027	3.2424	.50201	864
VAR00028	3.5644	.48698	864

VAR00029	4.6271	.46226	864
VAR00030	1.2093	.09583	864
VAR00031	1.5685	.42202	864
VAR00032	3.4424	.50201	864
VAR00033	1.3093	.09583	864
VAR00034	1.7861	.75031	864
VAR00035	1.6502	.64664	864
VAR00036	2.7000	1.01780	864
VAR00037	3.6049	1.19808	864
VAR00038	3.8831	1.34758	864
VAR00039	3.5049	1.19808	864
VAR00040	3.5831	1.34758	864
VAR00041	3.6424	.50201	864
VAR00042	3.8644	.48698	864
VAR00043	4.5271	.46226	864
VAR00044	1.2093	.09583	864
VAR00045	1.8685	.42202	864
VAR00046	3.4424	.50201	864
VAR00047	1.8093	.09583	864
VAR00048	3.8424	.50201	864
VAR00049	3.4644	.48698	864
VAR00050	4.0271	.46226	864
VAR00051	1.6093	.09583	864
VAR00052	1.4685	.42202	864
VAR00053	3.6424	.50201	864
VAR00054	1.2393	.09583	864
VAR00055	3.1524	.50201	864
VAR00056	3.4644	.48698	864
VAR00057	4.9771	.46226	864
VAR00058	1.0493	.09583	864
VAR00059	1.7685	.42202	864
VAR00060	3.1524	.50201	864
VAR00061	1.0493	.09583	864
VAR00062	1.9861	.75031	864
VAR00063	3.5502	.64664	864
VAR00064	3.7000	1.01780	864
VAR00065	4.4049	1.19808	864
VAR00066	1.1831	1.34758	864
VAR00067	1.7049	1.19808	864
VAR00068	3.4831	1.34758	864
VAR00069	1.7424	.50201	864
VAR00070	3.2644	.48698	864
VAR00071	4.4271	.46226	864
VAR00072	1.6093	.09583	864
VAR00073	1.2685	.42202	864
VAR00074	3.5424	.50201	864
VAR00075	1.8093	.09583	864
VAR00076	3.7424	.50201	864

VAR00077	3.3644	.48698	864
VAR00078	4.0271	.46226	864
VAR00079	1.5093	.09583	864
VAR00080	1.4685	.42202	864
VAR00081	3.4424	.50201	864
VAR00082	1.3493	.09583	864
VAR00083	3.1024	.50201	864
VAR00084	3.4644	.48698	864
VAR00085	4.9871	.46226	864
VAR00086	1.0543	.09583	864
VAR00087	1.0685	.42202	864
VAR00088	3.9424	.50201	864
VAR00089	1.9093	.09583	864
VAR00090	3.4644	.48698	864

Objectives

1. Evaluate the extent which the amount cooperative members invested in risk sharing joint enterprise of cooperative influences their usage of savings.

The extent can be determined using correlation coefficient. The Correlation Analysis can be used to estimate extent in terms of nature and strength of relationship between variables. The variables of interest are amount cooperative members invested and usage of saving. Considering the variables, the independent variable is amount invested (x) and the dependent variable is usage of savings (y). Since dependent and independent variables can be identified, the most appropriate correlation approach is product moment correlation.

Scatter Plot of the Values

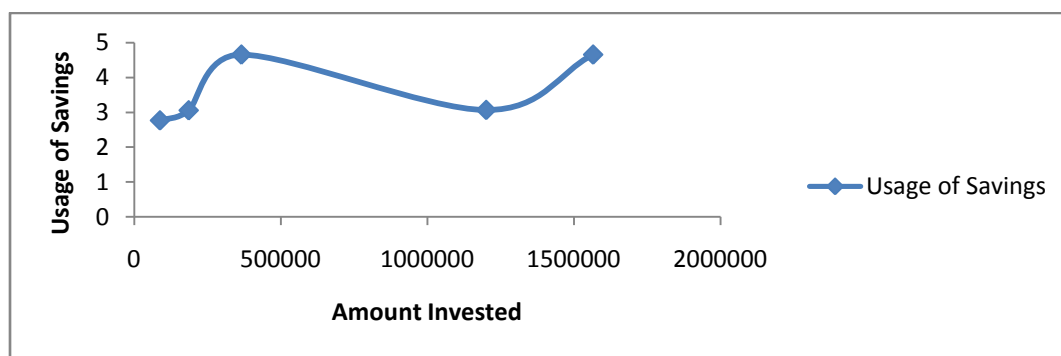


Figure 1: Scatter plot of amount invested and usage of savings

Output

		amount	usage
amount	Pearson Correlation	1	.740
	Sig. (2-tailed)		.049
	N	5	5
usage	Pearson Correlation	.740	1
	Sig. (2-tailed)	.049	
	N	5	5

Interpretation

The correlation coefficient is 0.74 which implies the variables are positively strong. This implies the independent variable is significantly affecting the dependent variable.

2. determine the influence of collective ownership of cooperative enterprises on members access, usage and quality of loan facilities in CICSL;

Graphical Presentation

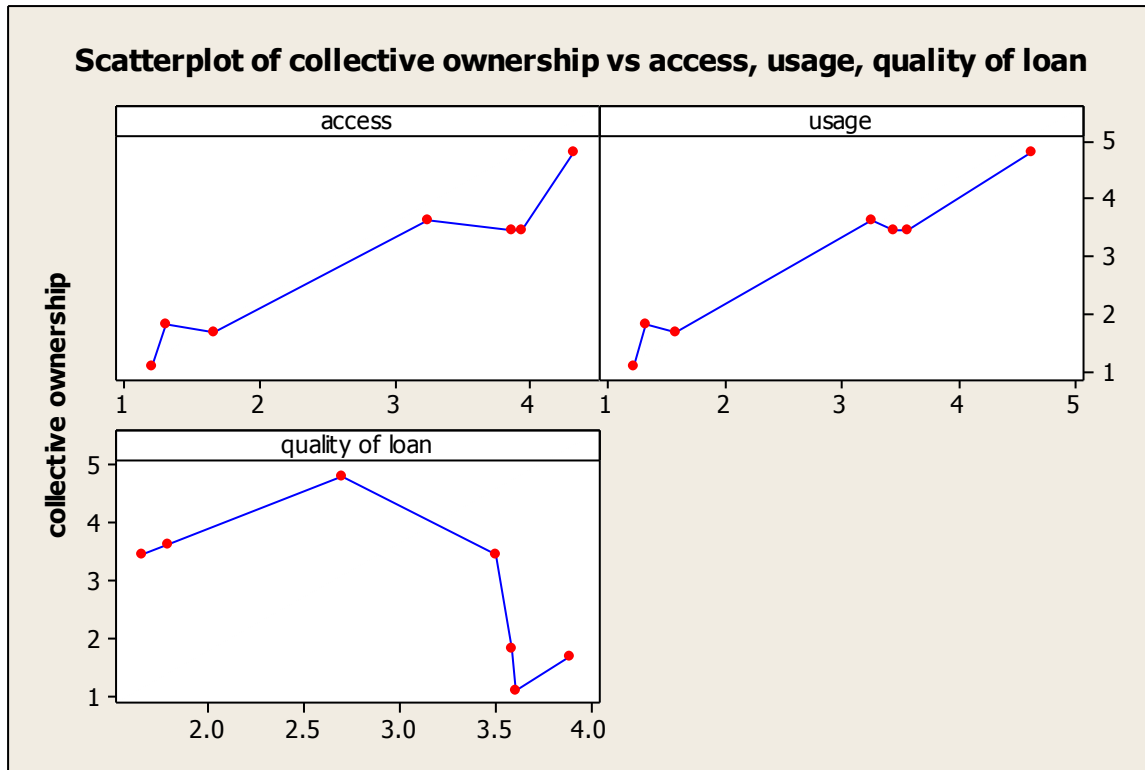


Figure 2: Scatter plot of the variables

Partial Correlation Output

Correlations			ownership	access
Control Variables	usage & quality	ownership	1.000	-.463
		Correlation		
		Significance (2-tailed)	.	.432
		df	0	3
	access	ownership	-.463	1.000
		Correlation		
Significance (2-tailed)		.432	.	
	df	3	0	

there exists weak negative relationship between the variables.

Correlations

Control Variables			ownership	usage
quality & access	ownership	Correlation	1.000	.857
		Significance (2-tailed)	.	.064
		df	0	3
	usage	Correlation	.857	1.000
		Significance (2-tailed)	.064	.
		df	3	0

there exists strong positive relationship between the variables.

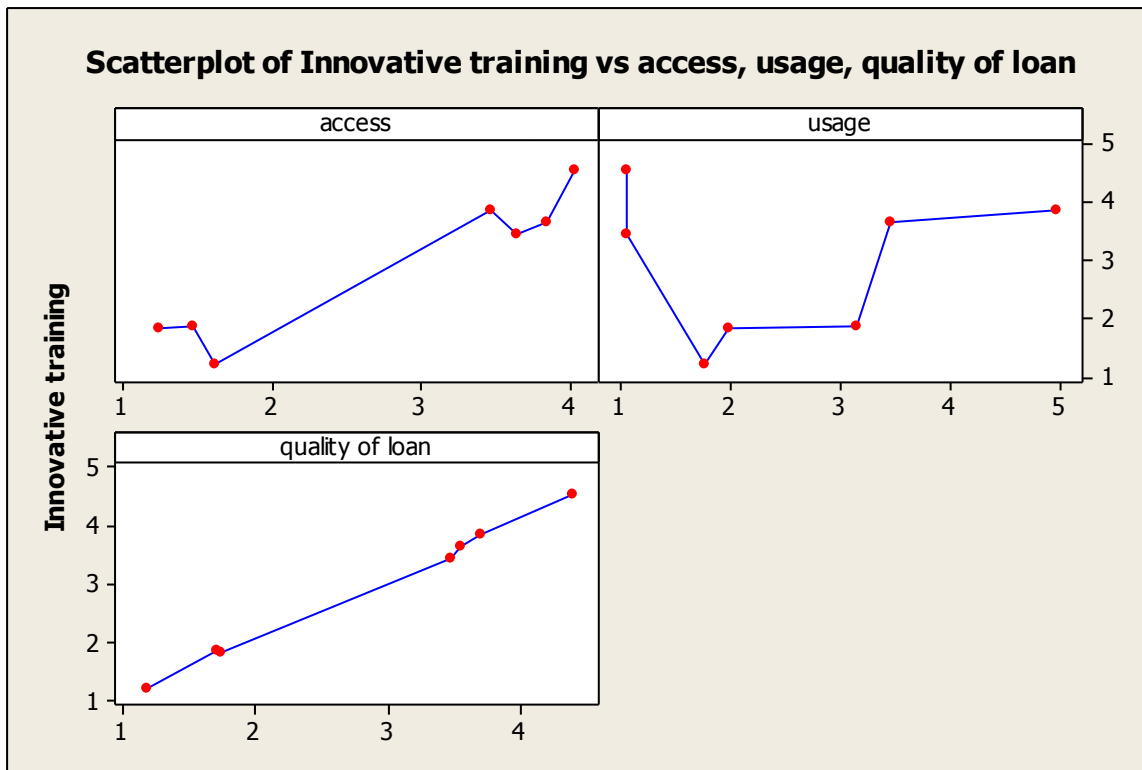
Correlations

Control Variables			ownership	quality
access & usage	ownership	Correlation	1.000	-.121
		Significance (2-tailed)	.	.846
		df	0	3
	quality	Correlation	-.121	1.000
		Significance (2-tailed)	.846	.
		df	3	0

there exists weak negative relationship between the variables.

3. Examine the effects of innovative/creative business training cooperative members received on their access; usage and quality of loan facilities in CICSL;

Graphical Presentation



Partial Correlation Output

Descriptive Statistics

	Mean	Std. Deviation	N
innovation	2.9091	1.26058	7
access	2.7562	1.24876	7
usage	2.4924	1.44335	7
quality	3.0812	.74206	7

Correlations

Control Variables			innovation	access
usage & quality	innovation	Correlation	1.000	.953
		Significance (2-tailed)	.	.012
		df	0	3
access	access	Correlation	.953	1.000
		Significance (2-tailed)	.012	.
		df	3	0

there exists strong positive relationship between the variables.

Descriptive Statistics

	Mean	Std. Deviation	N
innovation	2.9091	1.26058	7
usage	2.4924	1.44335	7
quality	3.0812	.74206	7
access	2.7562	1.24876	7

Correlations

Control Variables			innovation	usage
quality & access	innovation	Correlation	1.000	.433
		Significance (2-tailed)	.	.466
		df	0	3
	usage	Correlation	.433	1.000
		Significance (2-tailed)	.466	.
		df	3	0

there exists weak positive relationship between the variables.

Descriptive Statistics

	Mean	Std. Deviation	N
innovation	2.9091	1.26058	7
quality	2.8241	1.24788	7
access	2.7562	1.24876	7
usage	2.4924	1.44335	7

Correlations

Control Variables			innovation	quality
access & usage	innovation	Correlation	1.000	.994
		Significance (2-tailed)	.	.000
		df	0	3
	quality	Correlation	.994	1.000
		Significance (2-tailed)	.000	.
		df	3	0

there exists strong positive relationship between the variables.

- Evaluate the nature relationship that exist between social capital and members usage and quality of savings in CICSL;

Graphical Presentation

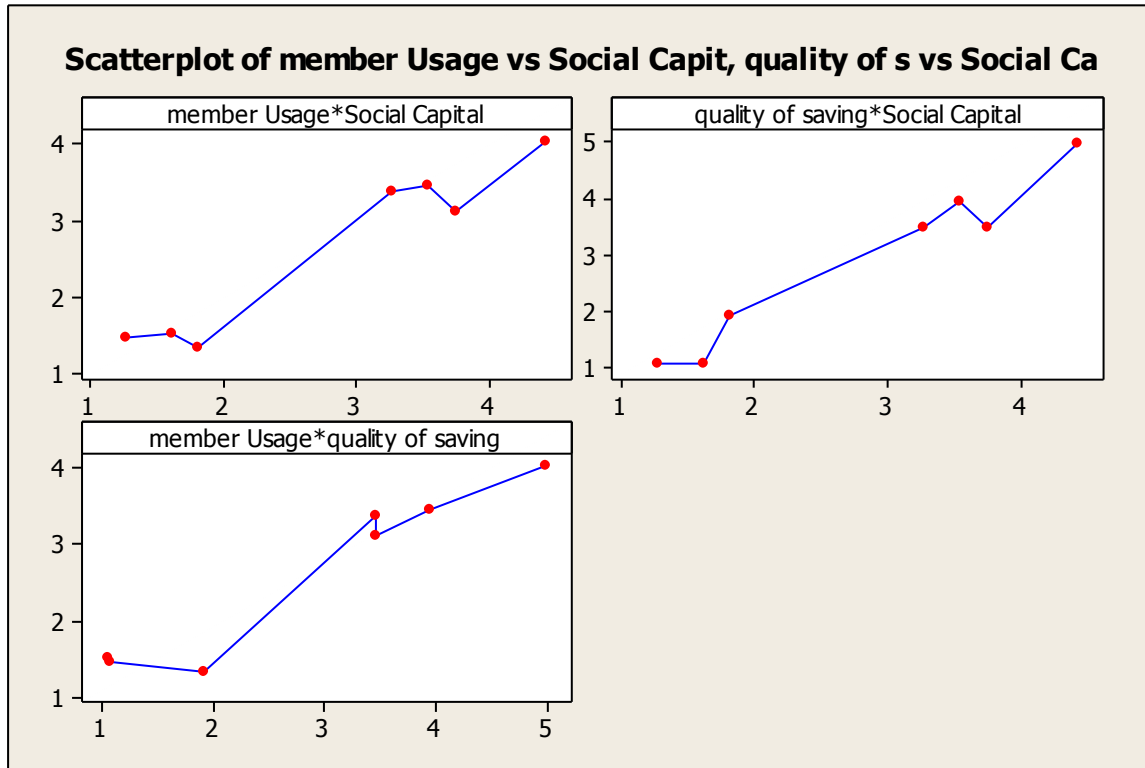


Figure: Scatter plot of the variables.

Output

Correlations Matrix: Social Capital, member Usage, quality of saving

	Social Capital	member Usage
member Usage	0.969	0.000
quality of saving	0.980	0.966
	0.000	0.000

Cell Contents: Pearson correlation

P-Value

Conclusion

Based on the correlation matrix above, social capital has strong positive relationship with member usage with P-value less than 0.05 which shows that the correlation value is significant. Also, the relationship between social capital and quality of savings is strong positive. Member usage and quality of saving is positive and strong. Therefore, the variables are strongly and positively related.

Hypothesis Testing

H₀₁: The amount cooperative member invested in joint risk enterprises of cooperative has no significant influence on their usage of savings facilities in cooperative investment and credit society limited;

Ordinary Least Square Regression (Simple Linear Regression) can be used to test the hypothesis since it is about determination of influence of a variable on another variable.

Output

Dependent Variable: USAGE

Method: Least Squares

Date: 08/13/17 Time: 18:58

Sample: 1 5

Included observations: 5

y (USAGE) = C(1) + C(2)* X (AMOUNT)

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	3.214988	0.660653	4.866379	0.0166
C(2)	6.21E-07	7.33E-07	0.848236	0.0486
R-squared	0.793441	Mean dependent var		3.638000
Adjusted R-squared	0.695412	S.D. dependent var		0.934340
S.E. of regression	0.008930	Akaike info criterion		3.063925
Sum squared resid	2.816475	Schwarz criterion		2.907701
Log likelihood	-5.659813	Hannan-Quinn criter.		2.644633
F-statistic	8.719504	Durbin-Watson stat		3.037931
Prob(F-statistic)	0.048623			

Decision Rule

Accept the null hypothesis if the P-value of the model is greater than 0.05, otherwise, reject.

Conclusion

The P-value of the test is 0.0486 which is less than 0.05. there exists enough evidence to reject the null hypothesis and conclude that the amount cooperative member invested in joint risk enterprises of cooperative has significant influence on their usage of savings facilities in cooperative investment and credit society limited.

The coefficient of determination of the model is 79.3% which shows the percentage of fluctuation in the dependent variable that can be explained by the independent variable. Also, T-test was used to determine the significance of parameters in the model. The P-value of the T-test are less than 0.05 which implies the parameters are significant.

H₀2: There is negative relationship between collective ownership of enterprises and members access; usage and quality of loan facilities in CICSL;

Multiple Linear Regression can be used to test the hypothesis. The dependent variable is collective ownership while other variables serve as independent variables.

Output

Descriptive Statistics

	Mean	Std. Deviation	N
CO	2.8519	1.34004	7
A	2.7948	1.35391	7
U	2.7091	1.33805	7
QL	2.9589	.92325	7

Correlations

		CO	A	U	QL
Pearson Correlation	CO	1.000	.951	.984	-.645
	A	.951	1.000	.982	-.625
	U	.984	.982	1.000	-.639
	QL	-.645	-.625	-.639	1.000
Sig. (1-tailed)	CO	.	.000	.000	.059
	A	.000	.	.000	.067
	U	.000	.000	.	.061
	QL	.059	.067	.061	.
N	CO	7	7	7	7
	A	7	7	7	7
	U	7	7	7	7
	QL	7	7	7	7

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	QL, A, U ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: CO

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.988 ^a	.976	.952	.29414

a. Predictors: (Constant), QL, A, U

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.515	3	3.505	40.511	.006 ^a
	Residual	.260	3	.087		
	Total	10.774	6			

a. Predictors: (Constant), QL, A, U

b. Dependent Variable: CO

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta				Lower Bound	Upper Bound
1 (Constant)	.374	.752			.497	.053	-2.021	2.768
A	-.427	.472	-.432	-.905	-.905	.032	-1.930	1.075
U	1.395	.485	1.393	2.876	2.876	.064	-.149	2.938
QL	-.036	.169	-.025	-.212	-.212	.046	-.574	.503

a. Dependent Variable: CO

The P-value of the model is less than 0.05 which shows the existence of evidence to reject the null hypothesis. This can be interpreted as at least one of the independent variables has positive effect on the dependent variables as against the proposed hypothesis of all the independent variables having negative effect.

From the model formulated, the independent variable with positive impact is usage.

H₀₃: Innovative/creative business training of cooperative members has not significantly influenced their access; usage and quality of loan facilities in CICSLS

The hypothesis can be tested using multiple linear regression with innovation as dependent variable and other variables as dependent variables.

Output

Regression Analysis: Innovative t versus Access, Usage, Quality of I

The regression equation is

Innovative training = - 0.0103 - 0.102 Access + 0.0332 Usage
+ 1.10 Quality of loan

Predictor	Coef	SE Coef	T	P
Constant	-0.01033	0.06982	-0.15	0.892
Access	-0.10160	0.06748	-1.51	0.029
Usage	0.03315	0.01658	2.00	0.039
Quality of loan	1.10364	0.06759	16.33	0.000

R-Sq = 99.9% R-Sq(adj) = 99.8%

Analysis of Variance

Source	DF	SS	MS	F	P
Regression	3	9.5241	3.1747	929.91	0.000
Residual Error	3	0.0102	0.0034		
Total	6	9.5344			

Conclusion

The P-value less than 0.05 is an indication of the existence of enough evidence to reject the null hypothesis. Therefore, it can be concluded that innovative/creative business training of cooperative members has significantly influenced their access; usage and quality of loan facilities in CICSL

H₀₄: Social capital has no significant relationship with member's savings usage and quality in CICSL.

For the determination of the existence of significant relationship among variables with one dependent variable and more than one independent variables, multiple linear regression can be used.

Output

SUMMARY OUTPUT	
<i>Regression Statistics</i>	
Multiple R	0.984115
R Sq	0.968482
Adj. R Sq	0.952722
S.E	0.266989
Obs.	7

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Sig. F</i>
Regression	2	8.76143	4.38071	61.455	0.00993
Residual	4	0.28513	0.07128		
Total	6	9.04656			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0.344497	0.31150	1.1059	0.3308	-0.52039	1.20938	-0.5203	1.20938
member Usage	0.366915	0.37250	0.9849	0.38039	-0.66733	1.40116	-0.6673	1.40116
quality of saving	0.530447	0.27676	1.91663	0.12776	-0.23796	1.29885	-0.2379	1.29885

Regression Analysis: Social Capit versus member Usage, quality of s

The regression equation is

$$\text{Social Capital} = 0.344 + 0.367 \text{ member Usage} + 0.530 \text{ quality of saving}$$

Predictor	Coef	SE Coef	T	P
Constant	0.3445	0.3115	1.11	0.031
member Usage	0.3669	0.3725	0.98	0.030
quality of saving	0.5304	0.2768	1.92	0.028

R-Sq = 96.8% R-Sq(adj) = 95.3%

Analysis of Variance

Source	DF	SS	MS	F	P
Regression	2	8.7614	4.3807	61.46	0.001
Residual Error	4	0.2851	0.0713		
Total	6	9.0466			

Conclusion

The p-value of the model is less than 0.05. there is enough evidence to reject the null hypothesis and conclude that social capital has significant relationship with member's savings usage and quality in CICSL

Appendix 4

Table 2: The Summary of G20 Financial Inclusion Indicators

NOTE: Indicators proposed in 2016 are shaded; revised indicators are not shaded

	Category	Indicator	Source	Frequency
		USAGE INDICATORS: ADULTS		
1A ^D	Adults with an account	Account (% age 15+) <i>Percentage of adults who report having an account (by themselves or together with someone else) with a formal financial institution or a mobile money provider</i>	WB Global Index	Triennial
1B		Deposit accounts per 1,000 adults	IMF Financial Access Surveys	Annual
1C	Number of accounts	E-money accounts per 1,000 adults	WB Global Payments Systems Survey	Annual
1D		Mobile money transactions per 100,000 adults <i>Number of mobile money transactions per 100,000 adults</i>	IMF Financial Access Surveys	Annual
2A ^D	Adults with credit at regulated institutions	Borrowed from a financial institution in the past year (% age 15+): <i>Percentage of adults with at least one loan outstanding from a bank or other formal financial institution</i>	WB Global Index	Triennial
2B		Outstanding loans per 1,000 adults	IMF Financial Access Surveys	Annual
3	Adults with insurance	Insurance policy holders per 1,000 adults <i>Disaggregated by life and non-life insurance</i>	IMF Financial Access Surveys	Annual
4	Cashless transactions	Retail cashless transactions per 1,000 adults <i>Includes: number of cheques, credit transfers, direct debits, payment card transactions (debit cards, credit cards), and payments by e-money instruments (card-based e-money instruments, mobile money products, and online money products)</i>	WB Global Payments Systems Survey	Annual
5 ^D	Adults using digital payments	Made or received digital payments (% age 15+) <i>Percentage of adults using a transaction account (with a bank or other formal financial institution or mobile money provider) to make or receive a digital financial payment</i> <i>Includes: Use the internet to pay bills or make purchases online; Use a phone to pay bills, make purchases, or send or receive money from an account (with a bank or other formal financial institution or mobile money provider); Use a debit or credit card to make a direct payment from an account; Send or receive remittances to/from an account; Receive wages, government transfer payments, or agricultural payments to an account; Send utility or school fees from an account</i>	WB Global Index	Triennial
5A ^{*,D}	Payment using a mobile phone (from an account)	<Sub-indicator>Made payment using mobile phone (% age 15+) <i>Percentage of adults using a mobile phone to pay bills, make purchases, or send or receive money from an account (with a bank or other formal financial institution or mobile money provider)</i>	WB Global Index	Triennial
	Payments using	<Sub-indicator>Made payment using the internet (% age 15+)	WB Global Index	Triennial

	the internet	Percentage of adults using the internet to pay bills, make purchases, or send money online		
5C*,D	Payment using a bank card	<Sub-indicator>Made payment using a debit card (% age 15+) Percentage of adults using a debit card to directly make a payment from an account (with a bank or other formal financial institution)	WB Global Index	Triennial

	Category	Indicator	Source	Frequency
5D*,D	Payment using account	<Sub-indicator>Received wages or government transfers into an account (% age 15+) Percentage of adults who receive wages or government transfers into an account (with a bank or other formal financial institution or mobile money provider)	WB Global Index	Triennial
6 ^D	High frequency of account use	High frequency of account use (% age 15+) Percentage of adults with high frequency use of an account. "High frequency" is defined as having taken money out of a personal account(s) at a bank or other formal financial institution 3 or more times in a typical month, including cash withdrawals, electronic payments or purchases, checks, or any other type of payment debit, either by account owner or third parties.	WB Global Index	Triennial
7 ^D	Saving propensity	Saved at a financial institution (% age 15+) Percentage of adults that saved at a bank or other formal financial institution in the past year	WB Global Index	Triennial

USAGE INDICATORS: ENTERPRISES

8A ^G	Formally banked enterprises	SMEs with an account at a formal financial institution (%) Percentage of Small or Medium Sized Enterprises (SMEs) with an account at a bank or other formal financial institution	WB Enterprise Surveys	3-5 years **
8B		SME deposit accounts (as a % of non-financial corporation borrowers) Number of SME deposit accounts (as a % of non-financial corporation borrowers)	IMF Financial Access Surveys	Annual
9A ^G	Enterprises with outstanding loan or line of credit at regulated institutions	SMEs with an outstanding loan or line of credit (%) Percentage of SME with outstanding loan or line of credit from a bank or other formal financial institution	WB Enterprise Surveys	3-5 years **
9B		SME loan accounts (as a % of non-financial corporation borrowers) Number of SME loan accounts (as a % of non-financial corporation borrowers)	IMF Financial Access Surveys	Annual
10 ^G	Digital payments to or from enterprises	SMEs that send or receive digital payments from an account (%) Percentage of SMEs that send or receive digital payments from an account	WB Enterprise Surveys (Aspirational)	3-5 years

ACCESS INDICATORS: PHYSICAL POINTS OF SERVICE

11A		Branches per 100,000 adults Number of branches per 100,000 adults	IMF Financial Access Surveys	Annual
11B		ATMs per 100,000 adults Number of ATMs per 100,000 adults	IMF Financial Access Surveys	Annual
11C		Agents of payment service providers per 100,000 adults Includes: agents of banks and other deposit-taking institutions,	WB Global Payments Systems Survey	Annual

	Points of service	<i>as well as specialized entities such as money transfer operators and e-money issuers</i>		
11D		Mobile agent outlets per 100,000 adults <i>Number of mobile agent outlets per 100,000 adults</i>	IMF Financial Access Surveys	Annual
11E		POS terminals per 100,000 adults <i>Number of POS terminals per 100,000 adults</i>	WB Global Payments Systems Survey	Annual
11F ^D		Access to a mobile phone or internet at home (% age 15+) <i>Percentage of adults with access to a mobile phone or device or internet access in the home</i>	Gallup World Poll	Triennial
12	Debit card ownership	Debit cards per 1,000 adults <i>Number of debit cards per 1,000 adults</i>	WB Global Payments Systems Survey	Annual
	Category	Indicator	Source	Frequency
13 ^G	Enterprise points of service	SMEs that have a POS terminal (%) <i>Percentage of SME's that have a point of sale (POS) terminal</i>	WB Enterprise Surveys (Aspirational)	3-5 years **
14	Interoperability of Points of Service	Interoperability of ATM networks and interoperability of POS terminals (0-1) <i>Takes the value 1 if most or all ATM networks (/POS terminals) are interconnected and 0 if they are not interconnected</i>	WB Global Payments Systems Survey	Annual
QUALITY INDICATORS: FINANCIAL LITERACY AND CAPABILITY				
15	Financial Knowledge	Financial knowledge score <i>Arithmetic score which sums up correct responses to questions about basic financial concepts, such as: (A) Inflation, (B) Interest rate, (C) Compound interest, (D) Money illusion, (E) Risk diversification, (F) Main purpose of insurance.</i>	WB Financial Capability Surveys and OECD National Financial Literacy and Inclusion Surveys	Periodic
16 ^D	Financial Behaviour	Use of savings for emergency funding <i>Percentage of adults that respond "savings" in response to the question: If you had an emergency that required [\$10, or 1/25 of GDPPC] urgently, where would you get the money? a) borrow from friends/relative; b) work more; c) sell assets; d) savings; e) loan from savings club; f) loan from bank; g) would not be able to find it</i>	WB Global Findex	Triennial
QUALITY INDICATORS: MARKET CONDUCT AND CONSUMER PROTECTION				
17	Disclosure Requirements	Disclosure index combining existence of a variety of disclosure requirements: <i>(1) Plain language requirement (e.g. understandable, prohibition of hidden clauses) (2) Local language requirement, (3) Prescribed standardized disclosure format, (4) Recourse rights and processes (5) total rate to be paid for a credit (basic costs plus commission rates, fees, insurance, taxes)</i>	WB Global Consumer Protection Survey	Annual
18	Dispute Resolution	Index reflecting the existence of formal internal and external dispute resolution mechanisms: <i>(1) Internal dispute resolution mechanism indicator: law or regulation setting standards for complaints resolution and handling by financial institutions (including timeliness, accessibility, requirements to implement complaints handling procedures) (2) External dispute resolution mechanism indicator:</i>	WB Global Consumer Protection Survey	Annual

		<i>System in place that allows a customer to seek affordable and efficient recourse with a third party (supervisory agency, a financial ombudsman or equivalent institution)</i>		
19 ^G	Credit Barriers	Percentage of SMEs required to provide collateral on their last bank loan (reflects the tightness of credit conditions)	WB Enterprise Surveys and OECD SME Scoreboard	3-5 years **
		Getting credit: the strength of credit reporting systems and the effectiveness of collateral and bankruptcy laws in facilitating lending. Measured as “Distance to frontier” <i>The “distance to frontier” score aids in assessing the absolute level of regulatory performance and how it improves over time. This measure shows the distance of each economy to the “frontier,” which represents the best performance observed on each of the indicators across all economies in the Doing Business sample since 2005.</i>	WBG Doing Business	Annual

Source: *The G20 Financial Inclusion Indicators (2016)*

Notes:

* Adults may use more than one mode of payment; sub-indicators are not mutually exclusive categories.

** Enterprise Surveys are collected globally on a three- to five-year cycle.

‘D’ Data is also shown disaggregated by income (poorest 40% of households and richest 60% of house-holds); age (adults under 35 and adults 35 and older); and gender.

‘G’ Data is also shown for women-owned enterprises.

Appendix 5

Cooperative Investment and Credit Society Limited Bye Law