Master's degree thesis

LOG950 Logistics

Determinants of Members' Economic Satisfaction with their Cooperatives: An Empirical Study of Sidama Coffee Farmers Cooperatives Union, Sidama Zone, SNNPR, Ethiopia

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Number of pages including this page: 131

Molde, 22nd May 2017

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Acknowledgement

God is worthy to be praised!

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List of Abbreviations

AGFI	Adjusted Goodness of Fit Index
BOD	Board of Directors
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
df	degree of freedom
ECX	Ethiopian Commodity Exchange
EFA	Exploratory Factor Analysis
ESAT	Economic Satisfaction
EU	European Union
FCA	Federal Cooperative Agency
FGD	Focus Group Discussion
GA	General Assembly
ICA	International Cooperative Alliance
ILO	International Labour Organization
INFO	Information Sharing
IOFs	Investor-Owned Firms
KFCFCU	Kafa Forest Coffee Farmers Cooperative Union
KMO	Kaiser-Meyer-Olkin
NCBA	National Cooperative Business Association
OCFCU	Oromia Coffee Farmers Cooperative Union
OPPOR	Opportunism
PART	Participation
POFs	Producer-Owned Firms
RCT	Relational Contracting Theory
RMESA	Root Mean Square Error of Approximation
SCFCU	Sidama Coffee Farmers Cooperative Union
SEM	Structural Equation Model

SNNPR	Southern Nations, Nationalities, and People Regions
TCA	Transaction Cost Analysis
TCE	Transaction Cost Economics
TLI	Tucker Lewis Index
US	United States
USA	United State of America
USDA	United States Department of Agriculture
VIF	Variance Inflation Factor
YCFCU	Yirgacheffe Coffee Farmers Cooperative Union

Abstract

Purpose: The purpose of this study is to investigate determinants of member's satisfaction with their cooperatives. The study particularly examined the effect of trust, opportunism and information sharing on members' economic satisfaction in Sidama Coffee Farmers Cooperative Union. Moreover, the moderating effect of members' participation on opportunism was analyzed.

Design/methodology/approach: The study employed a descriptive research design. The population interest of this study was members of Sidama Coffee Farmers Cooperatives Union (SCFCU) consisting 47 primary cooperatives societies with a membership of 70,000 individual members. A total of 200 interview schedule were administered for members of primary cooperatives to collect the data. Hierarchical multiple regression was used to test the hypothesized relationships.

Findings: Trust and information sharing are positively associated with members' economic satisfaction whereas opportunism has significant negative effect on members' economic satisfaction. However, the negative association between opportunism and members' economic satisfaction is weakened when there is a high level of members' participation.

Research Limitations/Implications: Out of six cooperative unions operating in Ethiopia, this study focuses only on four primary cooperative societies that are members of SCFCU. This limit generalizing the finding to all cooperatives in the country. Therefore, other researchers can further extend the study to the other parts of the country. Moreover, the study used cross-sectional design, further study can be done by using longitudinal design. The study focuses only on members' economic satisfaction, and further study can be conducted on members' social satisfaction as well. The study investigated opportunism only from cooperatives side; future study can be done on members free riding problems.

Theoretical Implications: This study provided further support for the association between the dependent variable (satisfaction) and independent variables (trust, opportunism and information sharing). Further, this study has contributed in showing the importance of participation in curbing the effect opportunistic behavior of cooperatives. The study found that members' participation plays a buffering effect for the opportunism behavior of cooperatives.

Managerial Implications: This study has presented antecedents to members' economic satisfaction. Boards of Directors/managers of cooperative should foster a high level of trust, facilitate timely, reliable and adequate flow of information, encourage active members' participation in decision-making process to minimize the negative effect of opportunism.

Key Words: Economic satisfaction, opportunism, trust, information sharing, members' participation, transaction cost analysis, agency theory, relational contract theory, cooperative.

CHAPTER ONE

INTRODUCTION

This chapter presents the background of the Ethiopian coffee market and the necessity of organizing cooperative in the area of coffee marketing. Besides, the chapter covers problem statement, objectives of the study, significance of the study, justification of the study and organization of the study.

1.1. Background of the Study

Of the various products traded in an international market, coffee is one of the most valuable agricultural commodities next to petroleum (Arslan and Reicher, 2011). Coffee in today's time is one of the most valuable sources of export for the East African nations of Ethiopia, Uganda, Kenya, and Tanzania. Ethiopia is known to be the birthplace and the primary center of diversity of coffee Arabica (Labouisse et al., 2008).

The intrinsic quality of the beans ranks Ethiopian coffee high and this is due to the diverse agro-ecological zones and immense genetic diversity (Kufa, 2011). Ethiopia is the largest coffee producer and ranks fifth in the world after Brazil, Vietnam, Colombia, and Indonesia, accounting for about 4.5 percent of global coffee production and first in Africa followed by Ivory Coast and Uganda by its yearly production (Tefera et al., 2016). Coffee has been the leading cash crop in Ethiopia for the last three to four decades. In Ethiopia, coffee is produced under four broad production systems, i.e. forest coffee (10%), semi-forest coffee (30%), cottage or garden coffee (50%) and modern coffee plantation (10%). Considering the country's suitable altitude, rainfall, temperature, and fertile soil, the potential for coffee production in Ethiopia is very high. It employs more than 20% of the economically active population and contributes more than 25% of the country's foreign exchange earnings (Kufa and Burkhardt, 2013).

Coffee production is almost exclusively positioned in the administrative zones of Keffa, Sidamo, Ilubabor, Wellega, Gedeo and Harerghe, which correspond to Oromia and the Southern Nations, Nationalities, and People Regions (SNNPR) that are found in the west and south of the country respectively (Minten et al., 2014). There are around four million estimated smallholder coffee farmers in Ethiopia producing 95% of coffee on less than one hectare of land farms (Gemech and Struthers, 2007).

It is observed that free market economy created many challenges for businesses particularly for smallholder farmers like coffee growers that have limited bargaining power, skills, and capacity. Consequently, many disadvantaged groups have chosen communal efforts through cooperative organizations as a means of accessing the benefits associated with a liberalized market system. Thus, several different types of cooperatives have been established to meet different objectives over the years (Emana, 2009). Cooperative according to International Cooperatives Alliance (1995) is defined as an autonomous association of people united willingly to meet their common social, cultural and economic requirements and goals through a jointly owned and democratically controlled enterprise.

In order to manage the coffee export business for the smallholder coffee farms that lacked human resource and logistical capacity, the government of Ethiopian took the initiative in establishing Coffee Farmers Cooperative Unions. Therefore, with the issuance of Proclamation No. 147/1998, six coffee farmers' cooperative unions were established. These were Oromia Coffee Farmers Cooperative Union (OCFCU), Sidama Coffee Farmers Cooperative Union (SCFCU), Yirgacheffe Coffee Farmers Cooperative Union (YCFCU), Tepi Coffee Farmers Cooperative Union, Kafa Forest Coffee Farmers Cooperative Union (KFCFCU), Bench Maji Forest Coffee Producer Farmers' Cooperative Union (Kodama, 2009) and the same are currently active and in operation. Of these cooperative unions, OCFCU and SCFCU are the strongest and high performing cooperatives (Kormelinck, 2015).

OCFCU was founded on June 1, 1999, and its operation is exclusively in Oromia Regional State, which accounts for more than 65 % of the country's total coffee growing land. Currently, OCFCU consists of 360 primary cooperatives representing 332,393 household farmers. On the other hand, SCFCU was founded in 2001 representing coffee producing cooperatives situated throughout the Sidama Zone of Southern Ethiopia. Today, SCFCU represent 47 primary cooperative societies and over 70,000 smallholders, making SCFCU the second largest coffee producing cooperative union in Ethiopia next to OCFCU. SCFCU produces approximately about 10,000 tons of high-quality Organic Arabica beans per year, 95% of which is washed (Kormelinck, 2015).

Taking this growth and performance of Sidama Coffee Farmers Cooperative Union (SCFCU) into account, the researchers are interested to investigate whether the individual members of primary cooperatives are satisfied by the services offered by their cooperatives. Members' satisfaction is

recognized as an important measure to ensure the business success of cooperatives. The goal is to meet the objectives through offered services. Harris & Harrington (2000) argue that customer satisfaction can be achieved by understanding the needs of their customers and effectively provide goods and services. Kodama (2009) underline that the role of cooperatives in promoting business is not only focused on the profit, but priority to their members' needs should also be emphasized. Members who are satisfied with the quality of services offered by their cooperatives will form a basis of cooperative business success. Therefore, members' satisfaction with their cooperative becomes the variable of critical importance to determine the possibilities of the cooperative sucess. This study, therefore, explores the antecedents of members' satisfaction with their cooperatives.

1.2. Research Problem

Supplier satisfaction is an important source of performance and the reason to maintain future business relations (Glavee-Geo, 2012). Satisfaction plays a key role in developing exchange relationships between trading partners (Hutchinson et al. 2011). There are various factors associated with satisfaction in an inter-organizational relationship. Opportunistic behaviors (Chao, 2014) trust (Doney and Cannon, 1997) and information sharing (Hsu et al., 2008) is being increasingly used as a measure of the success or performance for cooperative organizations (Hansen, Morrow, and Batista, 2002). Satisfaction influences the desire to continue as a cooperative member and thus the survival of the cooperative as a functioning organization (Hernández-Espallardo et al. 2013).

Most previous studies on buyer-supplier relationships have been found to be undertaken mostly on investor-owned firms (IOFs) or public organizations. However, cooperative business differs from other business in many aspects. One characteristic of cooperatives is the peculiar relationship of the organization with its members because the members are simultaneously the owners, users (buyers and sellers), controllers, and beneficiaries (Nilsson, 1996). Cooperatives differ from other business (other buyer-supplier relationship) in that Cooperatives are businesses owned and run by and for their members[1]. Despite the difference in the nature of the business of cooperatives, there is very little previous literature with regard to members' satisfaction with their cooperative (Hansen, Morrow, and Batista, 2002; Nilsson, Kihlén and Norell, 2009). These special features of

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[1]http://ica.coop/en/what-co-operative

cooperatives necessities the need for examining the factors that influence member's satisfaction with their cooperatives.

Based on these realities; understanding the determinants of members' economic satisfaction with their cooperatives helps to point out the area of improvement for the success of a cooperative business. The purpose of this study is, therefore, to fill the gap by investigating the determinants of members' economic satisfaction with their primary cooperative societies in Sidama Coffee Farmers Cooperative Union. The study specifically attempts to answer the following research questions based on the theoretical framework of relational contracting theory, transaction cost analysis and agency theory: What are the factors that affect member's economic satisfaction with their cooperatives? How does members' participation influence the effect of opportunism on members' economic satisfactions?

1.3.   Objectives of the Study

The general objective of this study is to investigate determinants of member's economic satisfaction with their cooperatives. The specific objectives are to:

1. Investigate factors affecting member's economic satisfaction with their cooperatives, namely, trust, opportunism, information sharing, distance and dividend.

2. Examine how cooperative members' participation moderates the effect of cooperatives' opportunism on members' economic Satisfactions.

1.4.   Justification of the Study

In Ethiopia, cooperative societies are assuming a critical role in the country's rural development strategy, particularly, to improve commercialization of smallholder producers. Coffee marketing cooperatives are playing an important role in supporting coffee farmers by supplying the price information, capital, and transportation that small-scale farmers often lack. In addition, a cooperative, as an agent of smallholder coffee farmers can be a strong negotiator than an individual farmer in the international market (Kodama, 2007). Despite the immense contributions of primary cooperative societies in Ethiopia, adequate studies have not been done regarding members' economic satisfaction using inter-organizational relation theory. Therefore, we believe that this study will play an important role to know the determinants of members' economic satisfaction

with the help of buyer-supplier relationship theory as adapted to a cooperative business organization and point out areas of improvement for the success of a cooperative business.

1.5. Significance of the Study

Cooperatives are business entities that are established to create direct marketing between producers and consumers. They contribute a lot in maximizing the benefits of their members and customers. Among different kinds of cooperative existed in Ethiopia, this study focuses on selected primary coffee cooperative societies operating in Southern part of Ethiopia particularly, Sidama zone. The performance of coffee cooperatives partly depends on the economic satisfaction members gain from their cooperatives. Therefore, this study is helpful in bridging the knowledge gap about understanding factors that have an effect on the cooperative members' economic satisfaction. The outcome of this study is to indicate the ways for maximizing cooperative members' economic satisfaction, which in turn has a significant contribution for Ethiopian cooperatives development and growth.

1.6. Scope of the Study

This study aims at analyzing the business relationship between primary cooperative societies and their members in selling coffee produce and focused on Sidama zone, Southern Ethiopia. Specifically, it focuses on examining those factors that affect the members' economic satisfaction in a relationship they have with their cooperatives. The study focuses on four selected primary cooperative societies under Sidama Coffee Farmers Cooperatives Union (SCFCU). These cooperatives are from two districts namely Dale and Wonsho. Gane and Qege were selected from Dale district and Fero and Bokaso were from Wonsho district.

1.7. Organization of the Study

This research thesis consists of nine chapters. Chapter one describes the study background, research problem, objectives together with the significance of the study and the scope of the study. Chapter two describes an overview of the cooperative industry, especially on primary cooperative societies. Chapter three discusses the view of theories and literature related to our area of study. Agency Theory, Relational Contracting Theory and Transaction Analysis Theory are discussed. Chapter four presents the conceptual research model of this study and it is created based on those theories that are discussed in chapter three. In addition, this chapter presents the main hypotheses

tested in the study. Chapter five portrays the research design and methodology used in this study. It consists of sampling design and methods of data collection. Chapter six presents definition, operationalization, and measurement of variables. Chapter seven presents measurement assessment and data validation including screening, normality assessment, validity, reliability tests. Chapter eight describes the regression model and the hypotheses test results in this study. Finally, the result of the research, theoretical and practical implications, limitations and suggestions for further research studies are portrayed in chapter nine.

1.8. Summary of the Chapter

This chapter has provided a background of the study along with its research problem that forms the basis of this study. It has also discussed the objective of the study, justification of the study, scope and organization of the study. The next chapter discusses details of the coffee industry in Ethiopia in general and coffee cooperatives in particular.

CHAPTER TWO

OVERVIEW OF COFFEE COOPERATIVE IN ETHIOPIA

2.1.   Introduction

This chapter presents an overview of the history and movement of the cooperative sector in Ethiopia. The chapter is structured in seven parts. The first part of the chapter addresses definitions and principles of cooperatives; the second part deals with history of cooperative movement; part three presents briefly about agricultural marketing; the fourth part discusses the distinction between cooperative business and investor-owned firms; part five presents cooperative movement in Ethiopia; the sixth part deals with Ethiopian cooperative structure and the last part describes about the overview supply chain networks of Sidama Coffee Farmers Cooperative Union (SCFCU) followed by summary of the chapters.

2.2.   Definition and Principles of Cooperatives

In a statement on cooperative identity, the International Cooperative Alliance (ICA, 1995) defines a cooperative as "an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically controlled enterprise". International Labor Organization (ILO, 2015) defines a cooperative as, "an organization of persons, usually of limited means who have voluntarily joined together to achieve a common economic end through the formation of a democratically controlled business organization making equitable contribution to the capital required, and accepting fair share of the risks and benefits of the undertaking".

Furthermore, a cooperative is defined as a user-owned and controlled business that distributes benefits on the basis of use (Zeuli and Cropp, 2004). This definition recognizes three essential features of cooperatives: user ownership, user control, and proportional distribution of benefits. Cooperatives are based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity. In the tradition of their founders, cooperative members believe in the ethical values of honesty, openness, social responsibility and caring for others. The cooperative principles are guidelines by which cooperatives put their values into practice. There are seven internationally recognized cooperative principles (ICA, 1995).

Voluntary and Open Membership: Cooperatives are voluntary organizations, open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination.

Democratic Member Control: Cooperatives are democratic organizations controlled by their members, who actively participate in setting their policies and decision-making. Men and women serving as elected representatives are accountable to the membership. In primary cooperatives, members have equal voting rights (one member, one vote) and cooperatives at other levels are also organized in a democratic manner.

Member Economic Participation: Members contribute equitably and democratically control the capital of their cooperative. Members usually receive limited compensation, if any, on capital subscribed as a condition of membership. Members allocate surpluses for one or all of the following purposes: developing their cooperative possibly by setting up reserves, part of which at least would be indivisible; benefiting members in proportion to their transactions with the cooperative, and supporting other activities approved by the membership.

Autonomy and Independence: Cooperatives are autonomous, self-help organizations controlled by their members. If they enter into agreements with other organizations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control by their members and maintain their cooperative autonomy.

Education, Training and Information: Cooperatives provide education and training for their members, elected representatives, managers, and employees so that they can contribute effectively to the development of their cooperatives. They inform the general public - particularly young people and opinion leaders - about the nature and benefits of cooperation.

Cooperation among Cooperatives: Cooperatives serve their members most effectively and strengthen the cooperative movement by working together through local, national, regional and international structures.

Concern for Community: Cooperatives work for the sustainable development of their communities through policies approved by their members.

2.3.   History of Cooperatives

Cooperatives are found in almost every country and have developed in both capitalist and socialist economic systems (Jussila, Byrne and Tuominen, 2012). The historical development of cooperative businesses cannot be disconnected from the social and economic forces that shaped them. Cooperatives were created in times and places of economic stress and social upheaval. The first cooperative businesses created in Europe arose during periods of great social upheaval and distress caused by dramatic shifts in agricultural and industrial production practices. Prior to the industrial revolution, most families in England and other parts of Europe were largely self-sufficient, creating enough food and goods for their subsistence and small amounts for trading. The industrial revolution introduced the factory system of production and was marked by a rapid succession of remarkable inventions that accelerated the industrialization of business (Zeuli and Cropp, 2004). Uneven development of capitalism had made income distribution ill-balanced in societies.

Robert Owen was the first who reacted in England to the problem of workers employed under heavy conditions in factories. Owen regulated working conditions in his factory in favor of workers and he established cooperative villages entitled "New Harmony" (Leblebici, 2014). Although "New Harmony" cooperative was failed, his thoughts affected persecutors in any way. One of the disciples of Owen following his thought in England was Dr. William King. King, who studied many different disciplines, opened his first consumer cooperative store in 1928 in England. His starting point was to establish an organized union in a capitalist system where workers were to work under unfavorable conditions (Ibid.).

Fourier, a French philosopher, known as the commanding figure of the cooperative movement in France, was setting up a social organization model in order to realize the cooperative lifestyle around the same time. People were to live stand-alone in cooperative villages, which Fourier called "phalansteres". The daily experience of social groups was planned rigorously in villages (Leblebici, 2014).

One of the most common cooperatives which resulted in the genesis of the modern cooperatives movement was the formation of the Rochdale Equitable Pioneers Society in 1844. This was a consumer cooperative established in Rochdale, in northern England, by a group of twenty-eight workers in a weaving factory in the form of a shop. The Rochdale Pioneers were not the first to

form cooperative, but they were the first to make their cooperative succeed by learning mistakes made by earlier cooperative societies and to help others. Another important development regarding cooperatives serving as credit or banking institutions was the establishment of the first savings and credit cooperative in 1864 by Friedrich Wilhelm Raiffeisen in Germany. The objective of the Raiffeisen Bank was to provide savings and credit services in urban and rural areas based on the idea of "self-help" (Ortmann and King, 2007).

In the rural areas of Europe, cooperative associations have pioneered the provision of important services for their members, but also for the communities in which they operate. Most cooperatives are part of complex, cooperatively-owned network structures that combine diverse functions such as finance, insurance, marketing, extension and education among regions, branches and sectors. Initiated by a "social movement" in the time between 1870 and 1920, cooperative governance structure has emerged in countries like France, Germany, Italy, England, Austria, Switzerland, Denmark, Norway, Holland, Sweden and Finland. The decisive contribution that cooperative have made to the development of rural economies across Europe and the USA is well reported (Hanisch and Series, 2005).

In the European Union (EU) there are around 40,000 cooperative societies as of 2012, with about 600,000 workers and an aggregate turnover of more than 300,000 million Euros per year. Cooperatives account for over 50% of the supply of agricultural inputs and over 60% of collection, processing and marketing of agricultural products (General Confederation of Agricultural Cooperatives in the European Union (Arcas, Martín and Mínguez, 2014).

The cooperative movement in Sub-Saharan Africa dates from colonial times (Poole and de Frece, 2010). The purpose of establishing cooperative at the time was to support European settlement by establishing native farmers' societies into the externally controlled, monetized economy, where they could be taxed more easily while guaranteeing to produce for the export markets (Holmén, 1990). After independence, many African governments viewed cooperatives as suitable vehicles for agricultural development and socio-political change to help small and poor farmers without radically changing the distribution of economic power (Attwood and Baviskar, 1988). However, attempts to organize farmers into cooperatives have often failed because of problems in holding management accountable to the members (i.e., moral hazard), leading to inappropriate political activities or financial irregularities in management, although cooperatives have the potential to supply farm inputs and market farm products that are both important for agricultural development

(Ortmann & King, 2007). The main causes of the failures were attributed to excessive governmental intervention, as well as too much dependence on communal traditions of cooperation. Despite past failures, the role of cooperatives has been re-evaluated due to the retreat of governments from programs of rural development under economic liberalization policies (Braverman et al., 1991).

2.4. Agricultural Marketing Cooperatives

Cooperatives have been an important means by which farmers have gained economic power, assured themselves of supplies and market outlets, and achieved varying degrees of vertical integration. Cooperatives are also believed to improve the overall functioning of markets (increasing their competitiveness) by offering farmers a competitive yardstick against which to measure the performance of other firms (Trechter, McGregor and Murray, 2003). An agricultural marketing cooperative is an association of farmers who voluntarily cooperate to pool their production for sale. Then pooled production is marketed and distributed through the cooperative which is owned and controlled by the farmers themselves. Around the world, farmers are increasingly encouraged to join marketing cooperatives, and cooperatives hold a significant market share in agricultural product distribution from farms to final consumers (Deller et al., 2009).

An agricultural cooperative is a particular form of organization which aims at producing a member related collective goods. Agricultural marketing cooperatives bargain for better prices, handle processes or manufactures and sell farm products. The main economic benefits of agricultural marketing cooperatives are the profits gained from marketing activities, usually redistributed to members according to quantities delivered (Ortmann and King, 2007). Marketing individual farmer's outputs collectively lowers transaction costs and usually results in higher prices for farmers (Schroeder, 1992).

2.5. Cooperative Vs Investor-Owned Firms (IOF)

James and Sykuta (2005) pointed out that in contrast to investor-owned firms (IOFs) that are operated in the interests of investors, cooperatives are member-owned, member controlled and operated for the benefit of producer members and they argued that producers have higher levels of trust in cooperatives than IOFs. Casadesus and Khanna (2003) argue that Cooperatives or producer-owned firms (POFs) might be characterized by greater organizational trust than Investor-Owned Firms (IOFs). One characteristic of agricultural cooperatives is the peculiar relationship of

the organization with its members because these are simultaneously the owners, users (buyers and sellers), controllers, and beneficiaries (Nilsson, 1999). The United States National Cooperative Business Association (NCBA, 2005) also emphasizes the unique characteristics of cooperatives relative to other (investor-oriented) businesses:

Cooperatives are owned and democratically controlled by their members (i.e., those that use the cooperative's services or buy its goods) and not by outside investors. Members elect their board of directors from themselves. Major policy decisions are based on the one-member, one-vote principle, regardless of each member's investment in the cooperative (This is, in contrast to IOF, where the vote is conducted on the basis of the number of shares the investor owns). The principle of democratic governance is generally considered to be one of the most important characteristics of cooperatives.

Unlike investor-owned firms (IFOs), cooperatives return surplus income (revenue over expenses and investment) to members in proportion to their use or patronage of the cooperative, and not proportionate to their investment or ownership share.

In contrast to investor-owned firms (IFOs), cooperatives are not primarily interested in financial return on investments, but interested in providing a service to satisfy members' requirements for affordable and quality goods or services.

Cooperatives pay taxes on income retained for investment and reserves. Surplus revenues are returned, according to patronage, to individual members who pay taxes on that income.

2.6. Cooperative Movement in Ethiopia

Traditional cooperatives associations existed in Ethiopian society centuries ago in the form of *Iqub* and *Idir*. *Iqub* is an association of people having common objectives of mobilizing resources, especially finance and distributing it to members on rotating basis. *Idir* is an association of people that have the objective of providing social and economic insurance for the members in the events of death, accident, damages to property among others. In the case of a funeral, *Idir* serves as funeral insurance where community members elect their leaders, contribute resources either in kind or in cash and support the mourning member (Emana, 2009).

The beginning of a modern form of cooperatives in Ethiopia dates back into 1960 (the imperial era). Until 1974, cooperative societies were guided by the free market system. However,

membership was limited to the then landlords that produce and deliver industrial crops. During the socialist government (Derg regime) from 1974-1991, cooperatives were formed to assist the implementation of the Government's policy of collective ownership of properties. Under this system, cooperatives were forced to operate in line with socialist principles, which meant that production and marketing of produce were undertaken through collective mechanisms. Membership to a cooperative was also compulsory, which contravened the basic cooperative principle of voluntary participation (Emana, 2009). Cooperatives during the Derg regime were used as a political tool and members lacked real benefits and sense of ownership.

After 1991, when the current government took power, many of these cooperatives were looted by the local people, whereas others scaled down their activities due to failure to compete with private traders. After a moment of pause, cooperatives were revitalized first by proclamation No. 85/1994 and later by more comprehensive "Cooperative Societies Proclamation No. 147/1998". The latter proclamation has several distinct features (1) in terms of structure, cooperatives can have up to four layers (primary cooperatives, unions, federations, and cooperative leagues); (2) it outlines how profits should be distributed between cooperatives and its members; and (3) voluntary membership. At the beginning, people were suspicious about the role of cooperatives due to their negative experience during the military era (Bernard, Taffesse and Gabre-Madhin, 2008).

Today, cooperatives are playing an important role in both agricultural and non-agricultural activities, particularly in the area of agricultural marketing. As of 2016 the numbers of primary cooperative societies established and operating in Ethiopia is estimated to be 27,726 for non-agricultural cooperative societies; 22,379 for agricultural cooperative societies, 406 artisans' producers' cooperative societies; 3,469 consumers' cooperative societies; 18,527 savings and credit cooperative societies; 1,337 mining cooperative societies; 1,060 natural resource and tourism cooperative societies. The total number of the primary cooperatives amounts to 74,904 with individual member of 14,063,132 (about 14 % of the total population) and capital of 12,819,893,988 Ethiopian Birr (FCA, 2016)

In terms of secondary level cooperatives (unions), there are 219 Agricultural Cooperative Unions (from these, six of them are coffee cooperative Unions, including Sidama Coffee Farmers Cooperative Union); three are natural resource and tourism union; 31 are consumers' cooperative unions; 116 are saving and credit cooperative unions and one mining producers cooperative unions (FCA, 2016).

2.7. Structure of Ethiopian Cooperative

There are four tiers of cooperatives, namely primary cooperative, cooperative unions, cooperative federation and cooperative confederation. In Ethiopia, the apex in many regional states is the cooperative union. However, the Southern Nations, Nationalities and Peoples Regional State (SNNPRS) of Ethiopia has established the first Regional Farmers' Cooperatives Federation, which became functional in 2009. The regional cooperative federations focus on major economic and social services that individual unions cannot effectively accomplish (Emana, 2009). The Ethiopian Cooperative Society Proclamation No. 985/2016 describes the four tiers of cooperatives as follows:

Primary Cooperatives Society is a cooperative society established by individuals having similar interest and objectives with minimum number of 50 members to produce, provide service or to engage in both activities. The individuals, for example, may be coffee producers who join together and agree to collect their coffee produce, process and sell it jointly through an organized market. Primary cooperative societies enable their members to take advantage of economies of scale by pooling their resources together and sharing the costs of operating their society.

Cooperatives Society Union is a secondary level cooperative society established by two or more primary cooperative societies having a similar objective to produce, provide service or to engage in both activities that are beyond the capacity of primary cooperative society. The major activities of the cooperatives society union are; coordinating the activities of all affiliated primary cooperative societies, offering centralized services such as grading, standardization, processing etc., making avail of the current market trend to the members and providing technical advice and supervision.

Cooperative Society Federation is a tertiary level cooperative society established by two or more cooperative society unions having a similar objective to produce, provide service or to engage in both activities that are beyond the capacity of cooperative society unions.

Cooperative Society League represents primary cooperative societies, cooperative society unions and cooperative society federations operating in Ethiopia. It is the top most organizations in a cooperative structure. The League is expected to act as a link between cooperatives in Ethiopia and the International Cooperative Movement. Even though the proclamation outlined four levels

of cooperative organizational structures, Cooperative Society League has not been formed to date. The structure of cooperative is illustrated in figure 1 below.

Figure 1: Structure of Ethiopian Cooperative

Line of communication ---→ Facilitation/Capacity Building
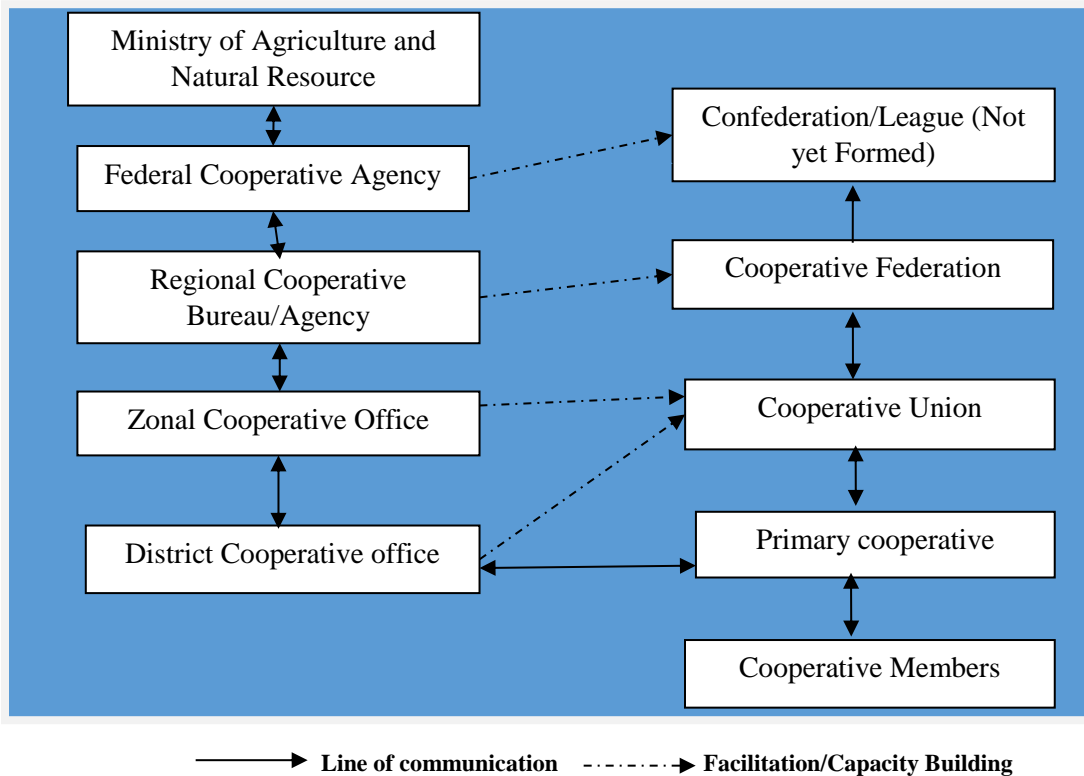
Source: Researchers' own drawing

2.8. Supply Chain Network of Sidama Coffee Farmers Cooperative Union

The basic supply chain network of Sidama coffee cooperative union (Figure 2) is illustrated as follows. The individual farmer grows coffee on his land and when the time comes for harvesting the farmers collect coffee beans (or hire labor for help) and Sell the coffee produce to primary cooperatives.

The primary cooperative societies are important participants in the coffee value chain of the union. The primary cooperative societies buy the coffee from its members at a price set by the local market conditions. Then they perform some processing activities like pulping, washing coffee, drying, sorting, sacking/packing and finally sell it to the union. The primary cooperatives also provide its members' free compost and technical training in field production. In addition, they provide support with transporting coffee to the center.

Quality control and standardization of coffee are done in the Union's own separate cupping lab. The union further processes the coffee and then the processed coffees are packed & transported to their warehouse and make ready for export market. Here the union has different alternatives to sell the coffee. It can sell directly to the international importer or to the domestic exporter through Ethiopian Commodity Exchange (ECX). The unions contact ECX for grading systems and to follow the rules and regulation of the government of Ethiopia.

When the union buys the coffee from the primary cooperatives, they pay the current market price set at ECX for the specific kind of coffee. When the union sells the coffee to foreign importing companies or ECX or internal customers, 70% of the net profit is paid back to the primary cooperatives. In turn, the primary cooperatives pay back 70% of their net profit as dividend to the farmers and 30% is reinvested in the cooperative, for the purpose of expansion, investment and social services (Proclamation NO. 985/2016). The dividend structure is government controlled and is the same for all cooperatives. Dividends to farmers are paid out on an annual basis (Proclamation No. 402/2004). Premiums are added for attributes such as quality, fair trade and organic certification (Kodama, 2007). The supply chain network of the Sidama coffee cooperative union is illustrated in figure 2 below.

Figure 2: The Basic Coffee Supply Chain Network of SCFCU
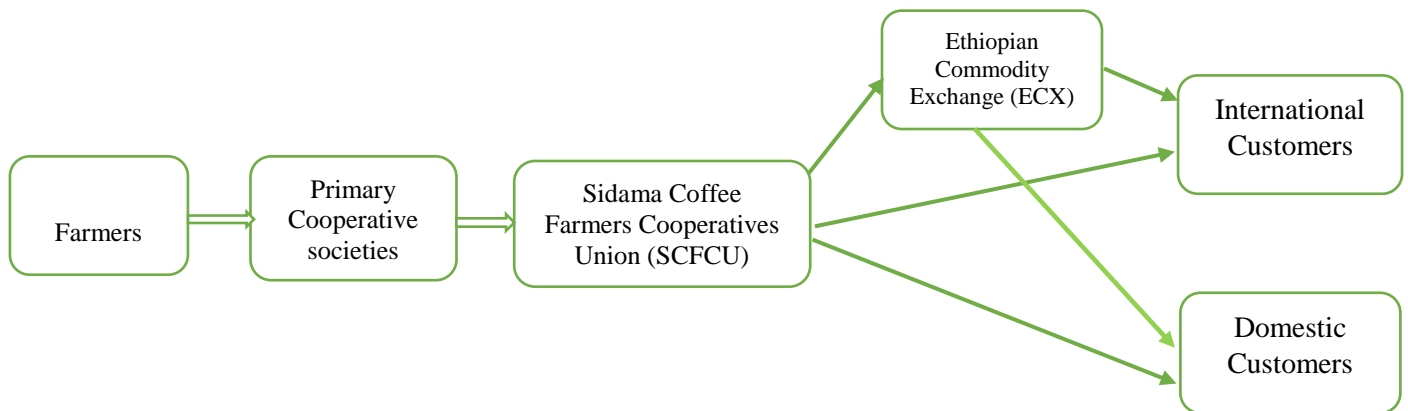
Source: Researchers' Own Drawing

2.9. Summary of the Chapter

This chapter briefly addressed definitions and internationally accepted principles of cooperatives, an overview of the movement and historical development of the cooperative business organization,

the importance of agricultural marketing cooperatives, cooperative structure of Ethiopia and finally distinction between cooperative business and investor-owned business was discussed. The next chapter presents the theoretical framework of this study.

CHAPTER THREE

LITERATURE REVIEW

3.1. Introduction

This section presents the literature review frameworks overview for the study. The theories discussed here are the agency theory, relational contracting theory and transaction cost analysis. Agency theory has been used to alleviate problems in democratic, member-based organizations, such as cooperatives. The study focuses on how agency theory can be applicable in cooperatives and used as a theoretical ground for participation which is used as a controlling mechanism. Transaction cost theory was used to provide a theoretical framework to see the effect of cooperatives' opportunism on members' satisfaction in a member – cooperative relationship. Furthermore, relational contracting theory was used to see how trust is associated with members' satisfaction.

3.2. The Principal-Agent relationship in the Primary Cooperative Societies and Members

The agency theory considers the relationship between the principal and agent and in this case, the principals are coffee suppliers (member farmers who have ownership/property rights over the cooperatives) and the agents are coffee buyers (the cooperative). The Strong relationship between the principal and agents like that of having a good information sharing system could bring a better performance resulting satisfaction to the principals.

Figure 3: Principal – Agent Relationship
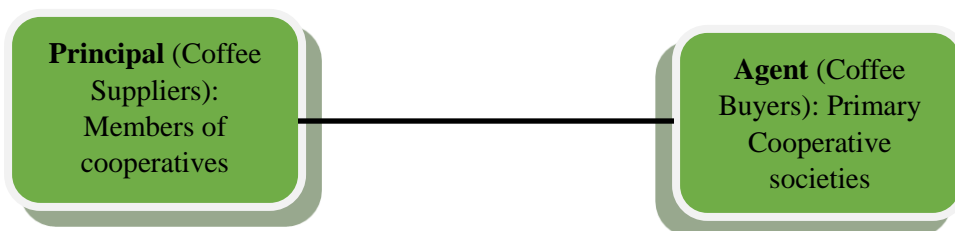
Source: Researchers' own drawing

3.3. Agency Theory

Agency theory is considered in this study to show the basic nature of the principal and agent relationship existed in cooperative business and as a theoretical ground for participation variable. Several scholars used agency theory in various subjects like marketing (Basu et al., 1985), political science (Mitnick, 1992), organizational behavior (Eisenhardt, 1989), and sociology (Eccles, 1983) among others. Researchers applied this theory in relationships like employer-employee, lawyer-client, buyer-supplier and other agency relationships (Harris & Raviv, 1978). Arrow (1986) pointed out that agency theory attracted people's attention as far back as 1960's. It originated from informational economics and it is related to risk sharing among cooperating parties. This theory tries to come up with solutions for both motivational and a measurement problem when both principal and agent face goal conflicts and principal is not in a position to validate the performance of his/her agent (Tate et al., 2010).

An agency relationship is assumed to exist when an individual or organization (agent) received a delegation to represent and acts on behalf of another (principal). A delegation of authority to agents means that agents are given the power to make decisions on behalf of principals. Several studies point out delegation of authority as the main reason for the rise of agency problems like goals conflict and Information asymmetry (Eisenhardt, 1989; Jensen and Meckling, 1976). Agency theory is focused on providing the solution for problems that might arise in an agency relationship. The problems might be a conflict which arises due to the deviation on the desire or goal of the principal and the agent or when it is difficult for the principal to verify what the agent is actually doing. The main problem here is that the principal cannot verify whether the agent appropriately behaves or not (Royer, 1999).

In the principal-agent relationship, the principal may not know exactly what the agent has done. The agent may not behave according to the agreement between them, due to the self-interest i.e. the agent may not be the best representative of the principal. It is obvious that in an agency relationship usually, the agent has more information about the details of individual tasks assigned to him and, of course, about his own actions, abilities, and preferences than the principal (Eggertsson, 1990). In the organizational thinking, agency theory assumes information as a commodity having cost and can be purchased. This gives an important role of the formal information system with the implication that organizations can invest on information to control the opportunistic behavior of the agent (Eisenhardt, 1989).

Agency theory attempts to describe relationship using the metaphor of a contract (Jensen & Meckling, 1976). Usually, a contract defined the agency relationship between the principal and the agent. The agent's goals can be better aligned with those of the principal, costs are incurred in structuring, administering, enforcing and adopting the terms of contracts. The contract binds the act of the agent to be according to the interests of the principal. When the contact between the agent and the principal is incomplete, the agent may be engaged in an opportunistic or shirking behavior and this is due to the moral hazard and imperfect observability (Royer, 1999). Shirking is defined as a deviation from expected behavior by employees that reduce the productivity of the firm concerned (Karaan, 1999). Agency theory is very crucial to the institutional structure of cooperatives since misrepresentation may exist and the managers (agents) may not act in the best interests of cooperative owner-members (principal). The agent-principal relationship problems have a high probability that dissatisfaction may arise (Ortmann and King 2007).

The agency problem exists due to adverse selection and moral hazard. Adverse selection occurs as agents have private information which hinders principal from making the right selection of agents and moral hazard occurs when the principal is unable to observe agent's efforts when performing the assigned task, as a result, the agent is tempted to shrink (Woodbine, 2008). Cooperatives face greater principal-agent relationship problems than corporations due to the lack of capital market discipline, a clear profit motive, and the transitive nature of ownership. Monitoring the actions of an agent (cooperative managers) by principals (members) is less incentive due to the lack of market for the equity of the principals (Richards, Klein and Walburger, 1998).

According to the general formulation of the principal-agent theory, managers have an incentive to behave opportunistically by maximizing their own utility instead of that of the members if members are not able to monitor managers' behavior (Russo et al. 2000). Several studies have emphasized on the importance of using monitoring in reducing agents' opportunistic behavior (Buvik and Rokkan 2003; Eisenhardt 1989). The principal needs to establish monitoring mechanisms to make sure that agents behave in the best interest of principal (Jensen and Meckling, 1976; Eisenhardt 1989) and thus principal has to ensure proper observation of agents' actions when performing the agreed task. Monitoring activities serve as control mechanisms, which suppress agent opportunism (Heide, Wathne & Rokkan, 2007).

To the extent that members of cooperatives have mechanisms of control (i.e. through participation in the governance of cooperatives by actively participating in the decision-making process), they

may minimize the effect of opportunistic behavior of members of the board of directors and professional managers, so that their decisions will help them to achieve their objectives.

3.4. Relational Contracting Theory

The researchers used relational contracting theory as a theoretical ground to support trust variable this is used in this study. The lawyer's traditional premise that states, "all contracts are mere transactions" is challenged by Macneil, who is a law scholar. Accordingly, he developed a norm-based approach, which is called Relational Contract Theory (Mouzas and Blois, 2008). Macneil (1980) presented the social contract theory which elaborated the contractual relations not only with respect to economic but also with a social perspective. This theory was further elaborated in 1983 and Macneil came up with a set of relational norms, which governs exchange's interpersonal aspect (Macneil, 1983). According to Macneil, (1980), the exchanging systems are not grouped based on the governance forms rather focused on portraying the behavioral aspects of exchange relationships. He also added that the application of norms does not determined by the governance form in which the exchange relationship takes place rather the atmosphere or relationship within which the exchange takes place determine norm application.

Relational Contracting Theory (RCT) hypothesizes that inter-firm relationship can emerge when firms in an exchange relationship repeatedly conduct business for a long period of time. It assumes that with such accumulation of engagements and the emergence of inter-firm relationship relational forms, trust and shared values can be developed and it defends the relationship from the likely opportunistic exploitation inherent in trading parties (Buvik and Halskau, 2001). In addition, it states that business engagements in prior exchange relationships are expected to develop relational norms, trust and behaviors that perpetually govern the way manufacturers and suppliers interact with each other (Buvik and Reve, 2002; Macneil, 1983).

According to Macneil (1980), norms are defined as accepted and expected patterns of behavior shared by members of an exchange system. Ivens and Blois (2004) identified ten relational norms that bind members of a group and serves as controlling, guiding and directing towards an acceptable and proper behavior by fixing limits within which exchange partners may seek alternative ways to achieve their goals. In addition, empirical studies have been widely researched on them and are operational in marketing research. These norms are; Role Integrity, Long-term orientation, Mutuality, Planning behavior, Solidarity, Information exchange, Flexibility, Restraint

in the use of power, Conflict resolution, and Monitoring. The authors further points out more operationalized norms in literature with large number of scales, these are; Solidarity, Flexibility, Long-term orientation and Information exchange. According to Heide and John (1992) Role integrity, Solidarity, Information exchange and Reciprocity are more vital norms for the preservation of exchange relationship.

Relational Norms and Trust

Trust is a relevant variable in this study and receives due attention in our research model and subsequent discussions. Trust is found to be at the heart of the relational approach and considered as key to the commitment development in buyer – seller relationships. Macneil (1980) and Morgan and Hunt (1994) explained that in relational contracting theory the existence of relational constructs i.e., trust and norms as the unique mechanism of governing behaviors in the inter-organizational relationships as the main assumption. Relational norms, according to various authors are defined as "antecedent to trust and as a pattern of accepted and expected sentiments and behavior shared by members of an exchange system that have the force of social obligation or pressure" (Macneil, 1983).

Generally, relational contracting theory regarded trust as crucial when thinking to build enduring relationships (Macneil, 1980). Therefore, as per relational contracting theory, personal relationships and the development of trust over a period of time influence the interaction of traders' relationships. Relationships developed over time serves as the focal point for having long-term and continuous business and personal transactions. Thus, this will result in relational contracts to be dependent on the historical and existing perspective of the relationship. This subsequently brings shared behaviors that rule the nature and strength of relationship eventually (Buvik and Halskau, 2001).

Trust refers to the willingness to rely on a trading partner in whom one has confidence. Therefore, with the presence of trust in an exchange relationship the need for contractual safeguard against future eventualities reduces (Moorman, Deshpande, and Zaltman 1993). Buvik and Halskau (2001) pointed out that inter-firm interactions, ongoing terms of trade and contractual practices could be established by treating the relationship status over the passage of time as the point of reference. In any business at its initial stages of their relationships, exchange parties have an incomplete understanding of each other's norms and values resulting initial trust to be very difficult (Heide,

1994). However, with the existence of formal contracts among exchange partners as time goes by, the norms stand as informal agreements and this is because of the finite duration of formal contracts (Wathne and Heide, 2000). Trust has also been found to reduce uncertainty and the threat of opportunism (Heide and John, 1990; Wathne and Heide, 2004).

3.5. Transaction Cost Theory

In this study, TCA was adopted to build an argument for opportunism variable. TCA's origin goes back as far as the 1930s. Ronald Coase and John Commons were the first to propound and suggested that different ways can be used to govern transactions with a different governance structure based on their respective transaction costs (Coase, 1937; Commons, 1934). According to Geyskens, Steenkamp and Kumar (2006), Transaction Cost Analysis (TCA) has served as the theoretical foundation for economists, theorists and other audiences on which many studies, especially in the marketing discipline and organizations in Business to Business, have been based on over the years.

TCA further developed by an economist named Oliver Williamson and Williamson (1975) in Berthon et al (2003) referred to Transaction cost economics (TCE) or Transaction cost analysis (TCA) as the way of organizing economic activity "*within and between markets and hierarchies.*" According to Coase (1937), transaction costs are those costs that are incurred for doing a transaction on the market. Transaction costs, as per Williamson (1985) are costs incurred in search for information, bargaining, signing contracts, monitoring and enforcing contractual commitments. From 1975 onwards, Williamson further extended the TCA theory and according to him, transaction costs increase as a result of market failures that are caused by human factors as bounded rationality and opportunistic behavior (Williamson, 1975).

Several theorists in TCA agreed that transaction costs undertake diverse forms, as direct costs or opportunity costs stemming from the foregone alternative transaction. In addition, they postulate that transaction costs can be either ex-ante, at the time of establishing agreements such as drafting and negotiating terms of exchange or ex-post, at the time of monitoring trading partner's performance and enforcing agreements so that trading partners act as per to contractual terms (Rindfleisch and Heide, 1997; Williamson 1985).

Transaction Cost theory is said to rely on the concept of opportunism and governance as the main foundation (Rindfleisch et al, 2010). In addition, Cordes et al. (2011) mentioned bounded

rationality and opportunism as the two basic behavioral assumptions on which transaction cost analysis relies. Bounded rationality refers when People tend to behave rationally but are sometimes limited by physical or language barriers to foresee all obstacles and when there exists limited capacity of individuals to process information and to formulate and solve complex problems. Rindfleisch and Heide (1997) added that bounded rationality can be shown with the fact that people are not capable of predicting future events and unable of processing a large amount of information.

Williamson (1981) indicates that in a bounded rationality context, organizational choices and complex contracts – including employment contracts arise. Bounded rationality results contracts that are not completed and implies that in all contractually relevant respects it is impossibile to deal with complexity. Boundedness of rationality is a starting point to transaction cost economics. In cultural transmission processes, humans constrained psychological resources are a fundamental part. One of the most important means for humans' finesses is the bounds of rationality by imitating or learning from. The human rationality limits in the face of a complex world to make people adopt behaviors that are culturally transmitted, often without an independent evaluation of their outcomes (Boyd and Richerson, 2001). Hence bounded rationality determines the human choice between different kinds of behavior.

Besides these human factors, three dimensions, namely asset specificity, uncertainty to which transactions are subjected to and the frequency with which transactions recur determine transactions (Williamson, 2004).

Asset specificity refers to the degree to which an asset can be redeployed to alternative uses and by alternative users without sacrifice of productive value (Williamson, 2005). Relationship-specific assets are considered as the most important dimension describing a transaction because it may lead to hold-up problems (Groenewegen et al., 2010). According to Williamson (2005), the different forms of asset specificity (i.e., *site specificity, physical asset specificity, human asset specificity, dedicated asset specificity and intangible asset specificity*) are able to create bilateral dependency between the transacting partners, increasing the risk of hold-up problems. In such cases, internal organization might be a more appropriate form of organization than a market arrangement because it reduces dependency and uncertainty.

Uncertainty applies both to external circumstances surrounding a transaction as to internal behavioural conditions. The former refers to the unpredictable natural and economic environment,

while the latter allude to the difficulty of confidence and trust in the performance of an exchange partner (Verhaegen, 2002).

Finally, frequency reduces transaction costs in the sense that when transactions are recurrent, a certain routine and mutual understanding are created, leading to trust. Trust in turn lowers transaction costs as the need for formal enforcement mechanisms will be reduced (Verhaegen, 2002 and Groenewegen et al., 2010).

Opportunistic behavior among exchange partner is main area of interest in this study and it is specified as self-interest seeking with guile. It includes behavior such as lying and cheating and more subtle forms of deception such as violating agreements (Rindfleisch and Heide, 1997). TCA pointed out that opportunistic behavior by partners can be reduced with the application of monitoring acts as check or control mechanism. Opportunism implies that people try to seek their own interest. Some of the examples of opportunism in a relationship are a falsification of expense reports; the breach of distribution contracts; bait and switch tactics; quality shirking and violation of promotion agreements (Wathne and Heide, 2000). Opportunism presents costly implications since it leads to the use of non-productive additional expenses for control mechanism and monitoring. It also leads to opportunity cost in the form of deals which are foregone (Glavee-Geo, 2012).

Rokkan and Buvik (2003) studied free-riding behavior in a voluntary chain by considering self-interest in TCA. Opportunism can occur under any situation but it has been noted to be facilitated by conditions of vulnerability such an information asymmetry problem due to a partner's attributes or action or by lock-in conditions which represent vulnerability because the party cannot exit the relationship without incurring some economic loss. Due to this reason, the party can only endure it by tolerating the opportunism (Wathne and Heide, 2000). Williamson (2004), new institutional economists point out that opportunism exists within cooperatives in the form of opportunistic behavior of cooperative members towards each other.

3.6.   Summary of the Chapter

The theoretical frameworks used in the study were discussed in this chapter. Agency theory showing the agency relationship between cooperative members (principals) and the primary cooperative societies (agents) is also presented in this chapter. The other theories that are discussed

in the chapter were Relational Contracting Theory (RCT), which was used to discuss trust and Transaction Cost Analysis (TCA), which describes the opportunism in detail.

CHAPTER 4

RESEARCH MODEL AND HYPOTHESIS

4.1. Introduction

This section presents research model and hypotheses on the basis of the theories discussed in the previous chapter. The independent variables that are assessed were trust, opportunism and information sharing with one interacting term, which is participation, interacting with the primary coffee cooperative opportunistic actions. Two control variables, i.e., distance and amount of dividend were used in developing the conceptual model.

4.2. Research Model

This section presents conceptual framework. The model is developed to understand determinants of member's satisfaction with their cooperatives.

Figure 4: Conceptual Model
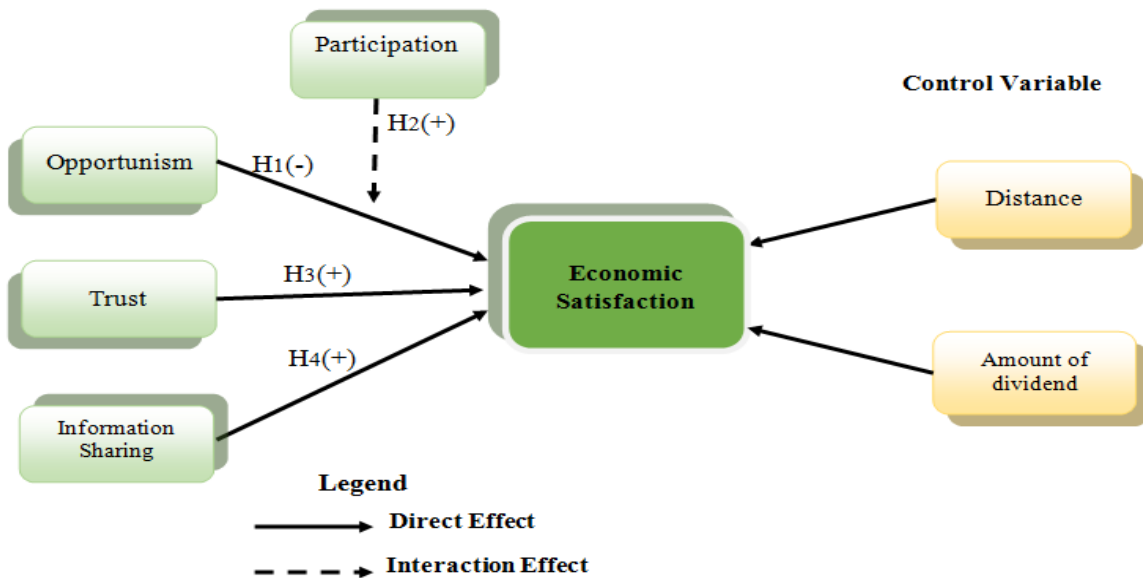
Source: Researchers' Own Drawing

The research model depicted on Figure 4 above presents the association between the dependent, independent and control variables used in this study. The dependent variable is primary cooperative societies members' economic satisfaction. Three independent variables that have direct effect on the depend variable are specified and these were cooperatives' opportunism, trust and information sharing. Two control variables are also considered in this study that have effect

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on the dependent variable and these are cooperatives members' farm distance from their primary cooperative societies and amount of dividend that the members receive from their cooperatives. Furthermore, the interaction between cooperatives' opportunism and members' participation is depicted to show the result effect on members' economic satisfaction.

4.3. Research Hypotheses

This section presents the relationship that the independent variables have with the dependent variable.

4.3.1. Trust and Economic Satisfaction (Hypothesis-1)

In recent years, trust has received a significant attention by management scholars and economists (Barney & Hansen, 1994; Sabel, 1993). Trust is an expectation that one would not be exploited by another. This expectation is based in part on perceptions of the trustworthiness resulting from reliability or intentions and competence of the entities in which trust is placed (Barney & Hansen, 1994; Sabel, 1993; Moorman, Deshpande and Zaltman, 1993). In addition, Morgan and Hunt (1994) assumed the existence of trust when another party has confidence in the integrity and reliability of the exchange partner. Trust is also explained as one's beliefs about the motives and intents of another party. Base on the above views trust is, therefore, the expectation that another partner performs actions that lead to positive outcomes and not perform unexpected actions that may lead to negative outcomes (Andaleeb, 1996).

Trust is considered as the foundation for strategic partnerships, and it appears to be an intermediary element in buyer-seller relationships (Nevins and Money, 2008). Heide and John (1990) and Wathne and Heide (2004) states that trust reduces uncertainty and opportunism's treat. It is also found that trust minimizes transactions costs by avoiding costly negotiations and contracting (Sako, 1992). In addition to minimizing transaction costs, a trusting relationship results in a reduction of uncertainty and information asymmetry (Dyer & Chu, 2003). Buyer and supplier hesitate to supply the required information due to the fear that it will increase their vulnerability. However, the existence of trust allows open information sharing (Narain and Singh, 2012).

Trust increases creativity, innovation, information sharing (Politis, 2003). Trust is often viewed as a multidimensional construct (Casielles, Álvarez and Martín, 2005), and two main dimensions of trust are mentioned by a large number of articles and these are specifically credibility and

benevolence. 'Credibility' is defined as the degree to which word of partners is believed and can be relied upon and 'benevolence' is also defined as the extent to which one partner is genuinely interested in the other party's welfare (Doney and Cannon, 1997). Therefore, benevolence is viewed as a basic factor in the development and evaluation of trust among the trading partners (Singh et al., 2005).

In order to have a quality relationship between exchange partners trust, commitment and satisfaction are central factors (Jap and Ganesan, 2000). Trust, according to Doney and Cannon (1997) enhance both customer and employee satisfaction. High degree of inter-organizational trust is found to minimize conflict and improves channel member satisfaction (Anderson and Narus, 1990). Glavee-Geo (2012) explained that a trustworthy relationship is a significant precursor for a satisfying relationship. Higher levels of satisfying relationships are likely to result from a trustworthy relationship and one, which requires that expectations by the either partners are met. If no trust existed among the exchange partners, committing time, energy and resources to establish a relationship is unlikely. Kiessling and Harvey (2004) have emphasized that lack of trust can create dissatisfaction and lead to the breakdown of relationships. On the other hand, satisfaction created when the service meets or exceeds the expectations of the exchange partners in the relationship (Anderson and Narus, 1984).

Trust plays a vital role in bringing positive impact on cooperatives. It is explained that the focus of most cooperatives investment of resources is to support efforts to satisfy members by building trust among members and management team (Hansen, Morrow, and Batista, 2002). Farmers in cooperatives by interacting with the management and members tried to satisfy their economic goals of their cooperative membership. Trust has a positive influence on satisfaction with inter-organizational relationships (Anderson and Narus 1990; Andaleeb 1996). By the same taken, Trust is likely to have a positive influence on cooperative members' perceptions of satisfaction (Narain and Singh, 2012).

It is expected that members who trust their cooperatives will perceive that the decisions of their cooperative will allow them to achieve their objectives. This will stimulate members to feel confident and satisfied with the cooperatives. Therefore, on the basis of the above arguments, we propose the following hypothesis:

  H$_1$: There is a positive association between trust and members' economic satisfaction.

4.3.2. Opportunism and Economic Satisfaction (Hypothesis-2)

Satisfaction refers to the overall attitude of customer behaviors toward suppliers of products and services (Kotler 2000; Hansemark and Albinson, 2004). Geyskens, Steenkamp and Kumar (1999) define satisfaction as the positive affective state resulting from the appraisal of all aspects of one organization's working relationship with another. Adopting this definition of satisfaction to cooperatives, the member´s satisfaction with the cooperative can be defined as a positive affective state resulting from the appraisal of all aspects of the member´s relationship with the cooperative. The concept of satisfaction with the cooperative is consistent with measurements of relationship's performance (Saxton, 1997). The underlying logic is that satisfaction is a focal consequence of a working partnership between a member and cooperative.

According to Athanassopoulos (2000), customer satisfaction is something that is closely related to the "value" obtained from a product or service that is harmonized with the concept. There is a two-dimensional construct of satisfaction consists of economic and non-economic (Geyskens, Steenkamp and Kumar, 1999). Economic satisfaction refers to a channel member's evaluation of the economic outcomes that result from the relationship with his partner while non-economic or social satisfaction refers to the psychosocial, non-economic aspects of the relationship in that interaction with the exchange partner are fulfilling, gratifying and characterized by tranquility (Geyskens, Steenkamp and Kumar, 1999; Geyskens and Steenkamp, 2000). Having these two economic and social dimensions of satisfaction, the present study focuses only on members' economic satisfaction. Adapting this concept to the cooperative, cooperative (as an agent) is formed to serve its members (principal) and operate for their benefit (James and Sykuta 2005; Ortmann and King, 2007).

The main reason for members to join cooperatives is to satisfy their economic objectives. However, in addition to this goal, members also want to satisfy social objectives. Some of the economic objectives are related to obtaining higher prices for the products or receiving high-quality services among others. Social objectives may include the desire to interact with other members and develop personal relationships (Ortmann and King 2007, Hansen, Morrow, and Batista, 2002). From the perspective of agency theory, members will be satisfied with their cooperative when the cooperative is perceived to act in their interests. Members' satisfaction is recognized as an important measure to ensure the business success of cooperatives. Members who are satisfied with the quality of services offered will form a basis of cooperative business success.

Nilsson, Kihlén and Norell (2009) indicate that the members' degree of satisfaction with the cooperative is related to the organization as well as satisfaction to the business. Satisfaction with the organization includes, for example, how satisfied members are with the information they receive and the treatment they obtain by the cooperative whereas satisfaction with the business is related to how satisfied the members are with the prices and services offered by the cooperative.

According to transaction cost analysis, Opportunism is an important variable in an exchange relationship. Williamson (1975) defines opportunism as ''*self-seeking with guile*''. Opportunism is conceptualized as a partner's passive or active behaviors that may exploit the association to its own benefit (Wathne and Heide, 2000). Opportunism comprises trying not being entirely truthful; avoiding fulfilling requirements, misleading, and withholding exertions (Mysen, Svennson, and Payan, 2011). Value creating can be eroded by an opportunistic behavior (Morgan and Hunt 1994); restrict trust-based relationships; or may affect other exchange outcomes negatively (Hawkins, Wittmann & Beyerlein, 2008).

The perception of opportunism by a partner in an exchange relationship is expected to result in dissatisfaction by that partner since the partner does not see the relationship to be economically rewarding (Glavee-Geo, 2012). Crosno and Dahlstrom (2010) finds support for the negative association between satisfaction and opportunism stating that when an exchange partner acts opportunistically, the economic rewards are reduced over a time period. Opportunistic behavior impairs a firm's overall satisfaction (Gassenheimer, Baucus and Baucus, 1996).

Therefore, we propose the following hypothesis:

> H_2: *There is a negative relationship between cooperatives' opportunism and members' economic satisfaction.*

4.3.3. Opportunism, Participation and Economic Satisfaction (Hypothesis-3)

Principal-agent problems in a cooperative are likely to give rise to member dissatisfaction (Ortmann and King, 2007). According to the general formulation of the principal agent model, if members are not able to monitor managers' behavior, then managers will have the motivation to act opportunistically by exploiting their own utility instead of that of the members (Russo et al. 2000). Nilsson, Kihlén and Norell (2009) argue that to the extent that a cooperative becomes very large and develops very complex business operations, the members are no longer able to control the cooperative, they have difficulty keeping themselves informed about the business, and

assessing what is happening in the firm. This hinders the participation of the members in the governance of the cooperative and they will probably become dissatisfied with it.

To the extent that the owners of the firm fail to exercise effective control over its managers, the managers are free to engage in self-dealing transactions and exhibit slack performance (Hansmann, 1988). Agency problems in cooperatives, which may arise from the diversity of objectives of cooperative members (principals) and Board of Directors and employed managers (cooperatives), compounded by the existence of asymmetric information. This may lead cooperatives to behave opportunistically that endanger the benefit of the principals (Arcas, Martín and Mínguez, 2014).

Hansmann (1988) argues that there is no separation between ownership and control in cooperatives. According to international principles of cooperatives, co-operatives are democratic organizations controlled by their members, who actively participate in setting their policies and making decisions[2]. One cause for the failure of cooperatives is not involving/participating members in the policy formulation and decision-making process (Ortmann and King, 2007). Members' participation in cooperatives business is, therefore, an important issue to be considered in the cooperatives sector and it is vital for the growth of cooperatives (Birchall and Simmons, 2004).

Members may participate in cooperatives in different ways, which can be categorized primarily as capital participation, transaction participation/economic participation, and management participation (Shao 2014). Capital participation refers to the share capital that members hold. Economic/Transaction participation consists of the volume of products members delivered to the cooperative (if the type of cooperative is marketing cooperatives). Management participation indicates members' involvement in decision making, i.e., attending the general assembly, holding a position on the board of directors. In this study, we used members participating in the general assembly and Board of Directors (BOD) position as the measure of their participation.

Participating in a general assembly means to renew member commitment of participating in the cooperative experience; voting in decisions that affect every member; and ultimately, to act in the social activity, to be an active part in building the cooperative (Pozzobon, 2011). Voting in the General Assembly is an essential part of the democratic character of decision making in

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[2]http://ica.coop/en/what-co-operative

cooperatives, and most cooperatives apply the principle of 'one-member, one-vote'. In the General Assembly (GA), members elect the members of the BOD, vote on major strategic decisions, and approve the annual financial report of the cooperative.

Besides exercising their formal decision power through voting, members of a cooperative participate in the GA to become informed, to express their opinions, to share experiences and information. It is the main platform for discussions and for members to show their dissatisfaction with any policy and actions of their cooperatives (Cechin et al. 2013). Members can participate in the annual meeting and ensure the cooperative is functioning democratically. However, the level of members' participation in the general assembly may vary from member to member.

In addition to participating in the General Assembly, members can increase their role in decision-making by taking part in diverse committees and boards (Barraud et al. 2012). This way a member has an opportunity to directly influence strategies, policies and projects of the cooperative. The generation of proposals for resource utilization and the execution of ratified decisions are the responsibility of the Board of Directors (Minguez, Martin and Arcas, 2010). Member participation in the board of directors is an obligation since they are elected to do so (Österberg and Nilsson, 2009).

Members should be informed about the cooperative activities and they should attend meetings, take their turn at committee and board of director's services (Zeuli and Cropp, 2004). Through participating in the general assembly meetings, committee's works, or as an elected leader on the board of directors, members are involved in the control, evaluation or monitoring processes of their cooperatives and thus participate in the governance of their cooperative organization (Gray and Kraenzle, 1998).

Active members' participation is important for members in all types of cooperatives. First, it helps members to implement highly efficient controlling and governance mechanisms (Osterberg and Nilsson, 2009). Second, active membership creates an important competitive edge over investor-owned firms (IOFs) and consequently adds value for member-customers (Bhuyan, 2007). Third, it facilitates a processss that can bring about changes in cooperatives that lead to higher levels of benefits and consequently of member commitment (Abrisham, 2011; Barraud et al., 2012). A higher level of member participation may reduce agency costs, as more members monitor management (Pozzobon, 2011). Members differ in their willingness to participate in their

cooperative's affairs. Some members may regularly attend general assembly meetings and participate in the board of directors. Others may not participate in any of cooperative meetings (Cechin et al, 2013). Agarwal (2001) identified different levels of member's participation as shown in table 1.

Table 1: Levels of Members' Participation

Level of participation	Characteristic features
Very low (nominal)	Membership in the group
Low (passive)	Being informed of decisions ex-post facto; or attending meetings and listening on decision making, without speaking up. This member is not interested in getting involved in decision making in any way
Middle (consultative)	Being asked opinion in specific matters without guarantee of influencing decisions.
High (active)	Being asked to (or volunteering to) undertake specific tasks. Expressing opinions, whether or not solicited, or taking initiatives of other sorts. This member always votes in the GA, therefore is more involved in democratic decision-making.
Very high (interactive)	Having voice and influence in the group's decisions. A member who believes he or she can influence the cooperative's performance in any way and who will, therefore, occupy positions at any board or committee at various levels exercising either managing functions or representative functions or both

Source: Agarwal (2001)

Active member's participation is important for cooperative members as it helps members to implement highly efficient controlling and governance mechanisms (Osterberg and Nilsson, 2009). Therefore, from the point of view of agency theory to the extent that members of cooperatives have mechanisms of control (i.e. through their participation in cooperative affairs), they may prevent opportunistic behavior of members of the board of directors and /or professional managers.

Following this argument, we propose that the negative effect of cooperatives' opportunistic behaviors reduces as the level of members' participation in the affairs of their cooperatives increases. Hence, the following hypothesis is developed.

H₃: The association between cooperatives' opportunism and members' economic satisfaction becomes less negatively shaped when the level of participation increases.

4.3.4. Information Sharing and Economic Satisfaction (Hypothesis-4)

Anderson and Narus (1990) defined information exchange as a form of communication between two partners that the exchange process at a particular time is done either formally or informally between sellers and buyers. Hsu et al. (2008) also define information exchange as the degree to which the vital information is available to members of the business relationship. In a business to business relationship information varies from tactical (purchasing, operations scheduling, logistics) to strategic (customer information, marketing and corporate objectives). Whether the information is formal or informal it enhances the visibility extent of the exchange partners and minimizes uncertainty level (Handfield and Bechtel, 2002).

There are five dimensions of information shared between buyers and suppliers. These are adequacy, credibility, timeliness, completeness and accuracy and these dimensions aggregately form a communication quality (Mohr and Sohi, 1996). Wilson and Nielson (2001) stated that supplier feels secured when a buyer is willing to share unforeseen information, which may have an effect on the operations of the supplier. It is also added that information sharing is a major precursor of trust where the accumulated trust leads to better communication.

It is indicated that information sharing between firms improves supplier's commitment and therefore increase exchange partners' satisfaction in their relationship by reducing buying firm's perceived unethical behavior over the suppliers. In a business relationship, dissatisfaction among partners can be resulted if the information is not well designed and adequately communicated. This, in turn, results threatening the performance and possibility of a long-term relationship (Spiker and Daniels, 1981). Information sharing by resolving conflicts and misunderstandings and by aligning perceptions and expectation, enhances trust (Etgar, 1979) subsequently, buyer's trustworthiness enhances supplier satisfaction.

Agency problem of opportunism is exacerbated by the presence of information asymmetry, a characteristic that clearly exists in the relationship between a member and a cooperative (Hernández-Espallardo et al. 2013). The relationship between the member and the cooperative is often based on information asymmetry. The cooperative has information, which the member does not. For example, the cooperative has information about market prices, and about clients' behavior (Borgen 2001). In order to satisfy cooperative members, it is important that they have as much as

information as possible. Barraud-Didier et al. (2012) argue that if cooperatives communicate more and share information with their members, the members will be more attached to the cooperative.

Following this argument, we propose that information sharing reduces information asymmetry and increases relationships between the principal (members) and agent (cooperative) that leads to greater satisfaction of members.

H_4: *There is a positive association between information sharing and members' economic satisfaction.*

4.4. Control Variables

4.4.1. Distance

This variable is included to reflect the distance of farmers' farm from their primary cooperative societies. This refers to the distance that the members travel to sell coffee produce to their primary cooperatives. Alene et al. (2008) argue that by increasing travel time and transport cost, market distance is expected to have a negative influence on market participation and the amount of produce sold by smallholder farmers. It is expected that those members who are located further away from their cooperatives have low economic satisfaction as compared to those located near to the cooperatives. This variable was measured by the average distance in kilometers from members' farms to their primary cooperative.

4.4.2. The amount of Dividend

Generally, dividend is defined as a portion of profit that is paid out by the organization to its shareholders as a reward for investing in the organization (Noordin et al., 2012). The dividend is a part of the profits of a cooperative which is paid out to a member of the cooperative in conformity with economic participation (patronage dividend) and with the value of his or her cooperative shares. In a cooperative, dividends are allocated not only according to shares but also according to "patronage".

According to International Accounting Standard Board (2008), "patronage refund" is payment to the members based on the volume of business that a member/shareholder conducts with the entity. In coffee marketing cooperative, for instance, patronage is the volume of coffee sold by members through the cooperative. It was expected that the higher the dividend a member obtain from a cooperative, the greater the satisfaction the member gets from his cooperative. This variable was

measured by the amount of cash that cooperative members receive from their primary cooperative societies.

4.5. Summary of the Chapter

This chapter presented an overview of the conceptual research model and hypotheses of this study. Literature review on agency theory, relational contracting theory and transaction cost analysis theory that were discussed in the preceding chapter were used to formulate the research model and to develop the hypotheses. Accordingly, four hypotheses were developed that goes in line with the conceptual research model and of which, three represents the hypothesized main effect and the fourth one was for the interaction effect. In addition, this chapter presents discussion on the control variables.

CHAPTER FIVE

RESEARCH METHODOLOGY

5.1. Introduction

This chapter presents the systematic and scientific methodological aspects that are pertinent to this study. The chapter presents the research design and the data collecting instrument used in this study. It discusses various techniques and methods that are used in this research. It explains the population of the targeted group, sampling design, sample size and the relevant analysis techniques employed to this study.

5.2. Research Design

A plan explaining how a researcher will collect, measure and analyze data by specifying the steps to be followed in undertaking a study in a coherent and logical way thereby, to address the research problem is referred to be research design (Churchill, 1979; Vaus 2001). The research design is also defined as an outline used to conduct a study with a control of the factors that may intervene with the findings' validity (Burns and Grove, 2005). Depending on the purpose of the research various literature classify research design into several categories. Churchil and Brown (2004) and Churchill (1979) categorize research design as descriptive, exploratory, or causal and effects. The descriptive design focuses on portraying accurately the characteristics of a particular individual, situation or a group; exploratory design deals with gaining familiarity with new ideas or achieving new insights about a phenomenon. The casual design, however, is concerned with the cause-and-effect relationships between variables (Churchil and Brown, 2004).

On the other hand, research design according to Malhotra and Birks (2006) and Creswell (2009) is categorized as a quantitative, qualitative and mixed-method approach. Quantitative research is a research approach used by a researcher based on the measurement of quantity or amount. In addition, it is a research approach used by researchers to gain knowledge by using observations and measurements to check the pre-established theories by implementing survey techniques and experiments that provide knowledge that will prove or disprove the pre-established theories at the end of particular research studies. Whereas, qualitative research is a research approach used by a researcher to gain an in-depth and interpreted understanding of attitudes, opinions and behavior.

Furthermore, it is used to formulate knowledge based on some existing historical and social views to establish a particular pattern from constructs that are observed through techniques like observing a phenomena, theories and case studies. Mixed method approach, on the other hand, is a research approach used by a researcher to seek knowledge by combining both quantitative and qualitative research approaches.

This study employed a descriptive research design which is also referred as ex-post facto research because the researcher has no control over the variables and the researcher can only portray what has happened or what is happening (Kothari, 1990). It includes survey and fact finding inquiries of different kinds that later be subjected to several correlational methods and comparative studies. Malhotra and Birks (2006) categorized descriptive research as cross-sectional and longitudinal research. Cross-sectional research design involves data that are collected at a single point in time, whereas, longitudinal research design involves data that are collected at multiple time points. Of these two categories of research design, this study applied cross-sectional research design to find out the association of the variables.

This research employed both qualitative and quantitative type of research approaches. In the initial stage of the study unstructured interview was carried out with officials of cooperative and with some informant groups from the members of primary cooperative societies. This helped the researchers to understand the nature and operating characteristics of the cooperative business organization. In addition, this led to the formulation of the problem that needs to be investigated. Hence, in order to answer the research question posed in this study, a survey research design was employed. Member coffee farmers of primary cooperative societies were included as a target population and individual survey data were collected from the member of small-scale coffee growers through the face-to-face interview schedule. In addition, secondary data from various published and unpublished documents were included in the survey design.

5.3. Empirical Setting

The study covered one of the administrative zones in the Southern Nations, Nationalities and Peoples` Regional States (SNNPRS) of Ethiopia. Sidama Zone was the focus of this study. The zone has 12 districts with a total population of 3,438,058 with an area of 6,538.17 square kilometers. More specifically, the study area is located 320 km south of the capital, Addis Ababa.

The area lies at 07° 04' North and 38°31' East on a Map and shares boundary with Oromia region in the south, Wolayta zone in the west, and on the north and east by Oromia region (Tefera, 2015).

Sidama zone is one the most densely populated areas and the most fertile in Ethiopia. It contributes about 4% of the Ethiopian total population. "Enset" (false banana) is the staple food of Sidama. The Sidama land also provides valuable resources to the economy. The zone is known for its cash crops, mainly coffee and other agricultural yields (Mengesha, 2016).

Sidama Coffee Farmers Cooperative Union (SCFCU) is the second largest coffee producer in Ethiopia next to Oromia Coffee Farmers Cooperative Union (OCFCU). In Sidama zone, SCFCU has 47 primary cooperative societies situated in different districts within the zone. The study considers four primary coffee cooperative societies that are located in two different districts namely Dale district and Wonsho districts and two primary coffee cooperative societies were selected randomly from each district. Accordingly, from Dale district, the targeted primary coffee cooperative societies were Gane and Qege whereas, from Wonsho district Fero and Bokaso primary cooperative societies. Fero primary coffee cooperative has 4,208 members and 2,322 members in Bokaso, 3,028 and 2,139, in Kege and Gane primary cooperative societies respectively.

Figure 5: Study Area

Source: Google Map

5.4. Sources of Data

The sources of the data for the research were both primary and secondary sources. According to Malhotra and Birks (2006), primary data are created by a researcher for the explicit purpose to address a problem at hand whereas, secondary data as it is already gathered for an objective other than the problem at hand. Smith (2011) recommends the use of both primary and secondary sources of data in combined. The primary data were collected from primary cooperatives members of individual coffee growers and from various relevant cooperative officials at district, zonal, regional, and federal level.

Using unstructured interview relevant data were gathered from federal cooperative agency officials, from the district and zonal coffee cooperative agency officials and from SCFCU officials. Furthermore, focus group discussion was conducted with four primary cooperatives officials and interview schedule was administered by four enumerators to gather primary data from primary cooperatives members. The other data sources used in this study were secondary data sources which were collected through a desk review of relevant literature from various sources such as journal articles, conference papers, books, theses, dissertations; reports and publication. In addition, operational manuals of primary cooperatives, SCFCU and other related organizations were used starting from the problem development.

5.5.   Population, Sampling Frame and Sample Size

Churchil and Brown (2004) recommend five steps to be followed in sampling design. These are; (a) definition of the targeted population; (b) selection of the sampling frame; (c) selection of sampling technique; (d) selecting the sample size; and (e) selection the sampling technique.

5.5.1. Population of the Study

The population is defined by Churchil and Brown (2004) as the totality of cases conforming to some designated specifications. A researcher can obtain population parameters either by considering complete enumeration of the population parameters –census or by choosing a sample –a subset of the population. However, this study considers a sample survey to obtain the desired sample. The population interest of this study was situated in Sidama zone, SCFCU which is the

second largest coffee producing cooperatives union in Ethiopia. It operates by consisting 47 primary cooperative societies with the membership of 70,000 coffee farmers[3].

5.5.2. Sampling Frame

Sampling is explained by Saunders, Lewis and Thornhil (2009) as a method used by a researcher in a research study in determining a subclass of a certain population that the data will be collected from. A sampling frame is further defined by various scholars as a complete list of population elements from which a sample can be drawn by a researcher (Churchil and Brown, 2004). The sampling techniques to be employed by a researcher are categorized as probability sampling or random sampling technique and non-probability sampling or non-random sampling technique.

Probability sampling is the one in which each element in the population has an equal chance of being incorporated in the sample. Probability sampling is explained in various forms as simple random sampling, stratified sampling, cluster sampling, systematic sampling as well as multi-stage sampling. Whereas, non-probability sampling select its samples from the population based on the convenience and availability. That means it does not give equal chance for every element in the population to be considered in the sample. A non-probability sampling includes sampling techniques as purposive sampling, snowball sampling, Quota sampling as well as convenience sampling (Saunders, Lewis and Thornhill, 2009).

Crano, Brewer, and Lac (2014) claim that using probability sampling produces higher external validity than using non-probability sampling. Furthermore, Malhotra and Birks (2006) added that probability sampling techniques produce unbiased estimates to generalize about a population. Hence, this study used cluster sampling technique which is probability sampling technique. The technique was adopted to create a representative sample of the two districts, namely Dale and Wonsho. Then after, a simple random sampling technique was applied to select the four-primary coffee cooperative societies (Fero, Bokaso, Gane and Qege) from the two districts. Furthermore, simple random sampling technique was used in selecting member coffee cooperative farmers from each primary cooperative society. A proportional allocation method was applied in selecting samples from each primary cooperative.

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[3]http://sidamacoffee.com/

5.5.3. Sample Size

Sample size as per Kothari (1990) is defined as the number of cases/elements that are gathered from the population to make a sample. This number of elements to be reliable, efficient, representative and flexible it should be optimum i.e., neither too small nor too big. No literature explicitly tells the exact number of a sample size to be selected rather it recommends critical points to consider at the time of selecting a sample size. One of the suggestions is the nature of the population either homogeneous or heterogeneous population. The homogeneous population is the one, which can be represented well by a small sample whereas, the heterogeneous population needs a relatively larger sample size that can capture more elements of a particular population. The other suggestions are the nature of the study, availability of resources, number of variables, sampling type, availability of time and so on.

Several authors recommend different ways of determining the sample size from a given population. For instance, Schumacker and Lomax (2004) suggested the use of at least 100 reasonable sample size when using the structural equation model (SEM), whereas, Hair et al., (2006) recommends a sample size between $100 - 150$. In addition, Hair et al. (2010) recommended that for factor analyses a sample size of 10:1 ratio as an acceptable. When researchers are using multiple regression, Tabachnick and Fidell (2007) suggested a reasonable sample size of 104 events plus the number of independent variables. This study has a total number of six independent variables, thus the minimum sample based on criterion is $104 + 6 = 110$. Furthermore, by considering the total size of the population, the researchers added a sample size of 90. Hence, this study has a reasonable sample size of 200 from the four-primary coffee cooperative societies, which is acceptable to conduct multiple regression.

5.6. Data Collection Methods and Procedures

According to Fowler (2009), beside questionnaire survey, several methods like telephone interview, mails, and web survey can be used to collect data in a cross-sectional survey approach. However, this study used a survey method consisting of a questionnaire instrument to collect data from the respondents. The main data collection instrument used was a face-to-face interview schedule. This method was selected due to the reason that the internet facility in Ethiopia is underdeveloped and the researchers inability to reach the respondents due to educational levels of respondents. The questionnaire for the interview was prepared according to the constructs that

were designed in the next chapter of the study. The questionnaire was designed in two parts. The first part consists open-ended questions about the general profile and control variables of the selected primary cooperatives members. The other part includs questions which were used to measure the dependent and independent variables. The researchers used seven-point Likert-scale type items with end points 'strongly agree' and 'strongly disagree' to measure the variables.

The questionnaire was developed first in English language and then translated to the language that was ease for the respondents' understanding. The appropriate way of translating procedures was applied at the time of translating the questions from the English language to the local language. A total of 200 questionnaires were collected from four primary cooperative societies. Of which 72 respondents were from Fero and 40 from Bokasso primary cooperative societies and 52 and 36 respondents were from Qege and Gane primary cooperative societies respectively. Four skilled professional enumerators, who have previous experience in data collection were selected and the researchers gave a one-day training for the enumerators so that they could understand the objective of the study which helped them to gather the relevant data. After that, the face-to-face interview schedule was administered and there was a very serious day-to-day follow up by the researchers in order to ensure that accurate filling and high response rate.

In addition to the face-to-face interview schedule collected by the professional enumerators, the researchers gathered additional data from the officials of the four-primary cooperative societies using focus group discussion. Kumar and Stern (1993) indicate that it is a common phenomenon to use of focus group discussion in the inquiry inter-organizational relationship. According to Heide and John (1990), focus group discussion comprises identifying respondents having sufficient knowledge about the phenomena under study and administrating the questionnaire for the selected respondents within the sampled firms to collect the data. Accordingly, the board of directors and professional managers, who have a better understanding of the business relationship with their cooperative members, are the key informants. After all the required data haven collected, the data was entered and coded in SPSS version 22 software for data validation and analysis.

5.7.   Summary of the Chapter

This chapter presented the research methodology used in this study. It has presented main research strategy which is the cross-sectional survey design. In addition, thorough discussion about the research setting, data sources, population, sampling design and sample size were made. The

definition, operationalization and measurement of variables are presented in the fourth coming chapter.

CHAPTER SIX

DEFINITION, OPERATIONALIZATION AND MEASUREMENT OF VARIABLES

6.1. Introduction

This section discusses the overview of operationalization and measurement of variables to be used in the study. It covers measurement models, measures development and definitions and operationalization of variables that are going to be used in the study. Moreover, it reviews the measurement of constructs used in previous studies and proposes adapted instruments for the study.

6.2. Operationalization and Measurement of Latent Variables

It is a challenging task to identify the importance of operationalization and measurement in social science research. This is due to the need to define the rules of observation to make precise and error-free observations (Strube, 2000). The variables of interest are not observed directly, rather instances of them are observed and therefore, used as proxies and this makes the precise definition of observations a challenging task. This informs the researchers about what might be true for the unobserved variables (Ibid). The operational definition of constructs, which are unobserved variables should be clearly stated as shown in the following figure 6.

Figure 6: Construct Operationalization
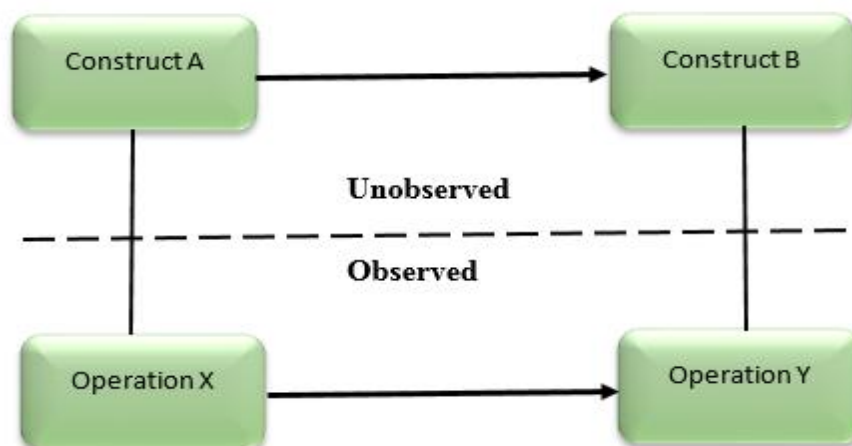
Source: Adapted from Strube (2000)

In order to make the unobserved variables measurement possible, the unobserved variables are linked to the observed variables. Byrne (2013) mentioned that observed scores are served as indicators of the underlying construct that they are supposed to represent. Strube (2000) stressed that giving a due attention to the quality of observation is very important. This is due to the fact that errors or mistakes made at the observation level can be transferred to the constructs thereby creating errors of inference about constructs leading to faulty scientific knowledge.

6.3.   Measurement Model

A latent variable is an unobservable theoretical construct (Byrne, 2013). Management researchers by relating statistical covariation among the latent constructs and the observed variables or indicators of the latent constructs identified structural relationships among latent, unobserved constructs (Borsboom, Mellenbergh, and Heerden, 2003). The observed variables are effect indicators (Simonetto, 2011). The relationship between latent constructs are explained using two measurement models in the inter-organizational studies, reflective measurement model and formative measurement model (Ibid).

Reflective model is the most popular approach where the construct is the cause of the observed measures. In this case, a variation in the construct leads to a variation in all its measures (Bollen, 1989). Because of the observed indicators share a common cause and are influenced by the same construct they are said to be inter-correlated. Reflective model ensure reliability since the measures are expected to describe internal consistency, (Jarvis, MacKenzie and Podsakoff, 2003). However, there may be circumstances where the theoretical latent variable of interest is caused by the observed measures. This situation refers to formative model. In formative model, the observed variables explain the construct. That means the variation in the latent variable is determined by the changes made on the indicators. This also means that changes in the latent variable do not imply variations in its casual indicators (Edwards and Bagozzi, 2000). The observed variables are not correlated and there is none internal consistency, hence, formative model demands criterion reliability and it accounts for errors at the construct level (Jarvis, MacKenzie and Podsakoff, 2003).

According to Coltman et al. (2008) researchers in psychology, marketing and management sciences are dominated by the reflective view. In order to decide whether the measurement model is reflective or formative, the following three theoretical considerations are crucial. i.e., (a) the construct nature (b) the causality direction among the indicators and the latent construct, and (c) the indicator's features used to measure the construct.

(a) The construct nature– the latent construct exists independent of a reflective model measure (Borsboom et al., 2003). However, the latent construct is dependent upon a constructivist, operationalist or instrumentalist interpretation by the scholar in a formative model (Borsboom et al., 2003). **(b)** the causality direction – in a reflective measure the causality is directed from the construct to the indicators. In contrast, in a formative model, causality is directed from the indicator to the construct (Bollen and Lennox, 1991). **(c)** indicator's characteristics – in the reflective model the inclusion or exclusion of one or more indicators from the set does not materially change the construct content validity. It is the change in the latent variable that brings variation in the indicator(s). This implies that all the indicators share a common theme and are interchangeable (Churchill, 1979). On the other hand, in a formative model, it is the indicator that brings variations on the latent variable. This implies that the construct is sensitive to the change made on the indicator(s). Hence, the inclusion or exclusion of an indicator can alter the construct concept significantly (Bollen and Lennox, 1991).

Figure 7: Measurement Models: (a) Reflective Model; (b) Formative Model
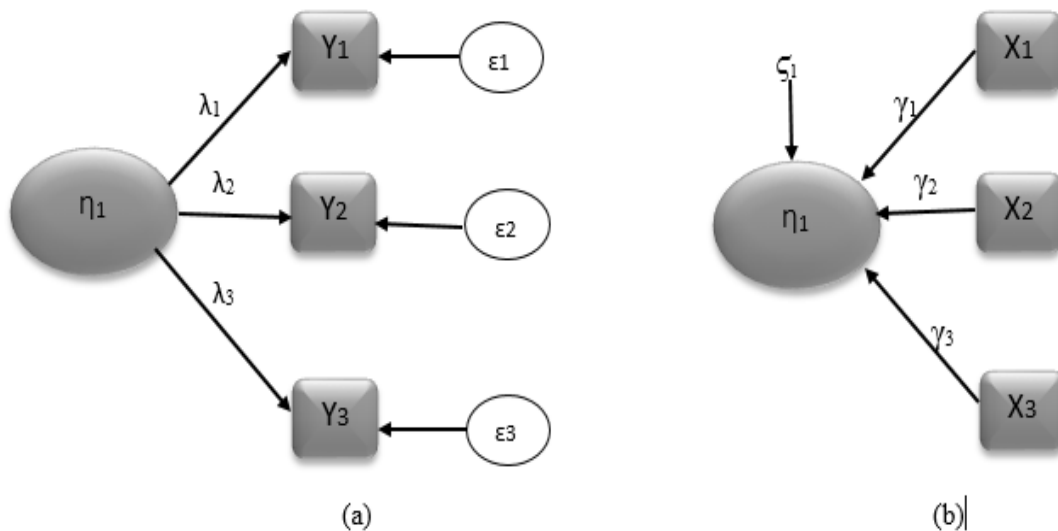
Source: Bollen and Lennox (1991)

6.4.   Measures Development

Slavec and Drnovsek (2012) states that the development of measurement scale starts with the specification of the domain of the construct which is done based on an in-depth review of literature. Extensive literature review on principal agency theory, RCT and TCA was conducted in order to identify constructs for our research problem at hand. This provides the benefits of ensuring the

validity and reliability of the construct (Buvik, 1995). A guideline in scale development process proposed by (Churchill 1979) was employed. The steps in the guidelines are; Item selection; Purification and Scale validation. All the constructs were operationalized as a reflective scale. The measurement scales are adapted from similar previous studies and modified to the context of cooperative business organizations.

6.5. Construct Definitions and Operationalization

This part discusses the constructs that are to be used for dependent variable, independent variables and control variables.

6.5.1. Dependent Variable

Members' Economic Satisfaction

Satisfaction expresses whether a person feels that a need or a desire is fulfilled (adapting this to the context of cooperatives, satisfaction refers to whether a member's needs or desires on the cooperative are fulfilled). According to Anderson and Narus (1984) satisfaction is defined as "a positive affective state resulting from the appraisal of all aspects of a firm's working relationship with another firm". Satisfaction involves the evaluation of both economic outcomes and social interaction between the exchange partners (Rodríguez et al., 2006).

Geyskens and Steenkamp (2000) defined economic satisfaction as "a channel member's evaluation of the economic outcomes that result from the relationship with his partner." By this definition, member's economic satisfaction with cooperatives refers to member's evaluation of the economic outcome from being a member of primary cooperative societies. Member's satisfaction construct was conceptualized and operationalized as a multidimensional construct for economic satisfaction. The construct for economic satisfaction consists of seven items based on (Glavee-Geo, 2012; Sanzo et al. 2003; Geyskens and Steenkamp, 2000) with anchor "1 = Strongly Disagree and 7 = Strongly Agree". The items are presented in Table 2.

Table 2: Questionnaire Item for Member Economic Satisfaction

Previously used item Statement	Source	Adapted Item Statement
My relationship with this buying company has been very beneficial for my farm business	Glavee-Geo (2012)	My membership with this primary cooperative has been very beneficial to sell my coffee product
I am always very satisfied with the amount of cash bonus paid to me by this buying company.	Glavee-Geo (2012)	I am satisfied with the amount of cash dividend paid to me by this primary cooperative.
The supplier is a good company to do business with	Sanzo et al (2003)	This primary cooperative is a good choice to sell my product.
I am very pleased with my decision to distribute the supplier's products since high quality increases customer traffic.	Geyskens and Steenkamp (2000)	I am very pleased with my decision to be a member and sell my product to this cooperative.
We would recommend other firms to do business with this supplier.	Sanzo et al 2003	I recommend other farmers to become a member of this cooperative.
-----	New	I am satisfied at the price paid to me for my coffee produce by this primary cooperative.
-----	New	Overall, I am satisfied with the way this cooperative does business as a firm.

6.5.2. Independent Variables

Trust

Trust has a critical role within organizations. For the proper function of individuals and societies trust is considered necessary. Trust implies 'the mutual confidence that no party to an exchange will exploit another's vulnerabilities' (Barney and Hansen, 1994). Trust is also regarded as a vital and extremely important lubricant of the social system (Arrow, 1986). Anderson and Narus (1990) added that trust is an important antecedent to cooperation. Trust considers the ability of a partner to perform as per agreements and his intentions to do so (Nooteboom, 1996). Trust construct has been used to show relational exchanges in a business to business (Razzaque and Boon, 2003, Sanzo

et al. 2003). An eight-item statement is formulated based on (Sanzo et al. 2003; Mavondo and Rodrigo, 2001; Doney and Cannon, 1997; Morgan and Hunt, 1994; Rempel, Holmes and Zanna, 1985; and Meyer, 2014) with anchors '1 = strongly disagree and 7 = strongly agree'. The items are presented in Table 3 below:

Table 3: Questionnaire Items for Trust

Previously used item Statement	Source	Adapted Item Statement
Our supplier is trustworthy.	Sanzo et al. (2003)	My cooperative is trustworthy in the transactions it makes with me.
My partner is honest and truthful with me.	Mavondo & Rodrigo (2001)	My cooperative is very honest and truthful in setting up prices for my produce.
This supplier is genuinely concerned that our business succeeds.	Doney & Cannon (1997)	My cooperative is working to maximize the welfare of my business.
We trust the information that this vendor gives us.	Doney& Cannon (1997)	I believe and trust the information provided by my cooperative.
In our relationship, sometimes my major supplier cannot be trusted.	Morgan and Hunt (1994)	There are times that I do not trust my cooperative (R).
I am prepared to let my partner make decisions on my behalf.	Rempel, Holmes and Zanna (1985)	I trust my cooperative and I am happy with the decisions that the cooperative makes.
I trust the authority to confirm that my medications are safe.	Meyer, (2014)	I trust my cooperative to receive my dividend pay in time.
I am familiar with the patterns of behavior my partner has established and I can rely on him/ her to behave in certain ways.	Rempel, Holmes and Zanna (1985)	I rely on my cooperative's actions concerning my business.

Cooperatives' Opportunism

In this study, opportunism behavior practiced by members of boards of directors and/or professional managers as perceived by cooperative members was examined. For this study, Opportunism items were adapted from (Glavee-Geo, 2012; Skarmeas, Katsikeas and Schlegelmilch, 2002; Gundlach, Achrol and Mentzer, 1995; Morgan and Hunt, 1994 and Provan

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Skinner, 1989). The construct consists of eight items and since opportunism connotes a negative phenomenon, the items are negatively worded with anchor "1 =strongly agree and 7 = strongly disagree." The items are presented in Table 4.

Table 4: Questionnaire Item for Opportunism

Previously used item Statement	Source	Adapted Item Statement
This purchasing clerk pays me cash bonus not commensurate with the amount of cocoa I supplied.	Glavee-Geo (2012)	My cooperative does not pay me a fair price for the coffee I supply.
This vendor has benefited from our relationship to my detriment	Skarmeas, Katsikeas and Schlegelmilch (2002)	My cooperative has benefited from my membership to this cooperative by providing misinformation.
The partner is not always sincere	Gundlach, Achrol and Mentzer (1995)	My cooperative is not always sincere about the correct payment of my dividend.
On occasion, I have to lie to my primary supplier about certain things in order to protect my interests.	Provan and Skinner (1989)	Sometimes my cooperative lie to me about the quality of coffee I supply in order to protect their interest.
This purchasing clerk has always not provided me with a completely truthful picture of my sales transactions with their company.	Glavee-Geo (2012)	My cooperative has always not provided me with a completely truthful picture of sales transactions taking place within this cooperative.
Sometimes this purchasing clerk alters the weighing scale slightly in order to get what they want.	Glavee-Geo (2012)	Sometimes my cooperative changes the weighing scale slightly in order to get what they want.
Partner breached formal or informal agreements to their benefits	Gundlach, Achrol and Mentzer (1995)	My cooperative violates principles and values of this cooperative to their benefits.
To accomplish his own objectives, sometimes my supplier promises to do things without actually doing them	Morgan and Hunt (1994)	Sometimes my cooperative promise to do things without actually doing them.

Members' Participation

Participation is a process whereby a group of people (members) find and implementing their ideas. It is a mental and emotional involvement of people in a group situation that encourages to group goals and share responsibilities for them (Ropke, 1989). Participation varies from passive participation to active participation. Passive participation is where members are merely involved by being told what is happening in the organization. On the other hand, active participation is when members by themselves take the initiative independent of management or external pressure to develop their cooperatives (Pretty et al., 1995). Furthermore, active participation and satisfaction of members are crucial for the long-term success of cooperatives (Bhuyan, 2007). Members differ in their willingness to participate in their cooperative's affairs. Some members may regularly attend general assembly meetings and participate in the board of directors. Others may not participate in any cooperative meetings (Cechin et al., 2013).

The construct for member participation consists of eight items with anchor "1 = Strongly Disagree and 7 = Strongly Agree." The constructs are adapted from (Podsakoff and MacKensie, 1994; Barraud et al., 2012; Cechin et al., 2013 and Tomaquin, 2013) developed to measure civic virtue behavior. The items are presented in Table 5.

Table 5: Questionnaire Items for Members Participation

Previously used item Statement	Source	Adapted/New Item Statement
Attends and actively participate in agency meeting.	Podsakoff and MacKensie (1994).	I regularly attend general assembly meetings.
Attend training/information session that cooperatives are encouraged but not required to attend.	Podsakoff and MacKensie (1994).	I actively participate in the training program.
If I participate in the cooperatives' democratic processes, I may be a part of influencing the cooperatives.	Barraud et al. 2012	My voice always influences the group's decision-making process.
Attend functions that are not required but help the agency/ company image	Podsakoff and MacKensie (1994)	I usually attend activities which are not obligatory for the members.

Previously used item Statement	Source	Adapted/New Item Statement
Perception that members can vote in every important decision	Cechin et al., (2013)	I participate in voting in every important decision that affects my business.
The members are given the opportunity of appraisal of the management team	Tomaquin (2013)	I have an opportunity to participate in the appraisal of the board members' performance.
-----	New	I always express my ideas during meetings.
-----	New	I usually expose if I suspect misappropriation of the cooperative fund.

Information Sharing

Anderson and Narus (1990) and Etgar (1979) conceptualized information sharing as the act of capturing and disseminating timely and relevant information for decision makers to plan and control supply chain operations, to stimulates a trustworthy exchange relationship and bring satisfaction. A strong relationship between the principal and cooperative is assured with a well-established communication system. Glavee-Geo (2012) explained information sharing as the "glue" that holds and binds together a distribution channel's participants. A nine-item statement is formulated based on (Morgan and Hunt, 1994; Sanzo et al. 2003 and Rempel, Holmes and Zanna, 1985) with anchors '1 = strongly disagree and 7 = strongly agree'. The items are presented in Table 6.

Table 6: Questionnaire Items for Information Sharing

Previously used item Statement	Source	Adapted/New Item Statement
In our relationship, my major supplier keeps us informed of new developments.	Morgan and Hunt (1994)	My cooperative keeps me well informed about the market situation.
In our relationship, my major supplier communicates well his expectations for our firm's performance.	Morgan and Hunt (1994)	My cooperative communicates his/her expectation on the coffee quality that I produce.
The supplier shares all important information that could affect our decision taking.	Sanzo et al. (2003)	My cooperative shares all vital information that could affect the

		decision I had to me with our relationship.
Though circumstances may change, we believe that the supplier will be ready and willing to offer us assistance and support.	Rempel, Holmes and Zanna (1985)	My cooperative is willing to inform me about fertilizers to be used in coffee production.
Though circumstances may change, we believe that the supplier will be ready and willing to offer us assistance and support.	Rempel, Holmes and Zanna (1985)	My cooperative is willing to inform me about pesticides to be used in coffee production.
The supplier keeps us well informed about any change or question that could be of interest.	Sanzo et al. (2003)	My cooperative and I have regular communication about any change that helps my business grow.
If we ask for some type of information, whether it is strategic, technical or operating, they supply it rapidly without any difficulty.	Sanzo et al. (2003)	My cooperative supplies me technical information.
If we ask for some type of information, whether it is strategic, technical or operating, they supply it rapidly without any difficulty.	Sanzo et al. (2003)	My cooperative supply me strategic information.

6.5.3. Control Variables

Distance

Alene et al. (2008) argue that by increasing travel time and transport cost, market distance is expected to have a negative influence on market participation and the amount of produce sold by smallholder farmers. The distance construct was operationalized as a single item scale and it was adapted from Alene et al. (2008). The construct was measured by a single question:

> *How far is your farm located from your primary coffee cooperative? _____km*

Amount of Dividend

Generally, a dividend is defined as a portion of profit that is paid out by the organization to its shareholders as a reward for investing in the organization (Noordin et al., 2012). Within the economic sphere, cooperatives offer their members variety of benefits based on their patronage. Patronage refunds may be cash or non-cash. Cash returns to the patrons at the end of the operation

year are cash patronage, whereas those that are invested by members in their cooperatives are noncash patronage (Williamson, 1987). The amount of cash dividend a member receives was operationalized as single item scale and the construct was measured by using the following single open question:

> *How much money do you receive in the form of a dividend from this primary coffee cooperative? _____Birr.*

6.6.   Summary of the Chapter

This chapter has discussed the measurement model and the constructs that were used in this study. It has presented the definition and operationalization of the construct for dependent variable, independent variables and control variables. In the next chapter, the assessment and validation of the measurement model using reliability and validity tests were presented and discussed thoroughly.

CHAPTER SEVEN

MEASUREMENTS ASSESSMENT AND DATA VALIDATION

7.1. Introduction

The operationalization approach used in this research is described in the preceding chapter. Assessment of credibility and quality of the data used for the analysis of this study are presented in this chapter. Series of descriptive statistical analysis like the treatment of missing data, outliers, and normality, homoscedasticity and multicollinearity tests were performed. This is to make sure that fundamental parametric regression assumptions are met so that regression analysis can be run successfully. In addition, results of exploratory factor analysis (EFA), scale validity and reliability tests results are presented in this chapter.

7.2. Preliminary Data Screening and Cleaning

Hair et al. (2010) stated that data screening is essential to activity to be carried out before applying appropriate data analysis procedures. He added that doing so helps to ensure all the requirements for multivariate analysis are met by the underlying data analysis. 200 interview schedules were administered to the selected respondents and all the interview schedules were returned, representing 100% response rate and analysis was made accordingly. This response rate is attributed to the fact that interview schedule was administered. Moreover, the data were collected by trained enumerators through a face-to-face interview with the respondents.

7.2.1. Assessment of Missing Data

Malhotra and Birks (2006), indicates that missing data is a critical concern in quantitative data analysis. This is because these missing data have a capacity of affecting the results of a study adversely. We carried out data validation starting with identification of missing data and we went through all the 200 interview schedules thoroughly and found none missing data. Four enumerators who have prior experience in gathering data and expert in the field of cooperatives were selected for administering the interview schedule. In addition, we conducted a one-day seminar to train enumerators and give them a glimpse of our research problem. Furthermore, there was a very serious day-to-day follow up by the researchers. This proactive measure helped us to have adequate and reliable data. For these reasons, no data missing was found.

7.2.2. Assessment of Outliers

Outliers are observations having significantly different features as compared to the other observations in the data set (Pallant, 2011, Hair et al., 2010). Outliers are also called deviant, an abnormality, and anomaly when one or more processes generate it. When certain data sets are generated in an unusual way, outliers can be generated (Aggarwal, 2015). Seo (2006) also added that when there are incorrect data measurements, erroneous data entry, or incompatible dataset, outliers could result. Therefore, it is a very crucial step in the data analysis to recognize and detect outliers. When such observations with extremely large or small values exist, taking corrective actions is mandatory. Generally, according to Kline (2016), observation score with more than three standard deviations from the mean is classified as an outlier. However, Hair et al. (2010) stated that outliers are defined with standard scores up to four for samples more than 80 observations as a rule of thumb.

This study used both histogram and box plot to check the existence of outliers. Pallant (2011) mentioned that these methods use simplified statistical chart which is easy to identify outliers in the data set. According to the SPSS output, both the histogram and box plot showed the non-existent of outliers. Moreover, items with actual values such as dividend ranged between 10,000 and 190,000 Ethiopian Birr and the farmers' farm distance from the primary cooperative societies ranged between one kilometer and 10 kilometers were transformed mathematically into a natural logarithm.

7.3. Assessment of Normality

Most statistical analysis works on the assumption and requirement of normality (Kline, 2016). Pallant (2011) explained normal distribution as it describes a symmetrical bell-shaped curve that portrays the greatest frequency of scores in the middle, with smaller frequencies towards the extremes. The most commonly used statistical tools to assess the normality of the distribution of the variables are kurtosis and skewness values (Tabachnick and Fidell, 2007). Skewness is a measure of how symmetric distribution is. Skewness can be either positive or negative. A distribution is positively skewed when the majority of the scores are below the mean score, whereas a distribution is negatively skewed if most scores are above the mean score. On the other hand, Kurtosis refers to how well the shape of the distribution conforms to a normal distribution. Kurtosis can also be either positive or negative. Kurtosis values are said to be positive when the

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distribution is huddled around the center with long thin tails whereas kurtosis values are said to be negative when the distribution is flatter than for normal distribution. Normally distributed observation resulted in zero value for both skewness and kurtosis (Tabachnick and Fidell, 2007).

Kline (2016) state kurtosis values as a rule of thumb to be between -3 to +3 and +1 to -1 for skewness values. Discriptive statistics of constract table (appendix 4.1) shows the values of skewness and kurtosis. Accordingly, the study resulted in both skewness and kurtosis values to be within the stated ranges.

7.4.   Descriptive Statistics

The general situation of the variables (i.e., Economic Satisfaction, Trust, Opportunism, Information Sharing, Participation, Distance and Dividend) used in this study are described by conducting descriptive statistics. Descriptive statistics is useful in describing sample characteristics and variables checking for violation of any of the assumption underlying statistical techniques to be used in addressing research questions. Descriptive statistics typically comprised of the mean, standard deviation, and range of scores (Tabachnick and Fidell, 2007). Descriptive statistics of constructs characteristics (appendix 4.1) demonstrates the mean, standard deviation, minimum and maximum of all the variables that are used in this study. One and seven are the minimum and maximum values for most of the constructs respectively.

According to the detailed descriptive statistics presented in appendix 4.2, the multi-scale mean values ranges from 1.25 (PART) to 7 (ESAT, TRUST, OPPOR, INFO and PART). The average distance of farmers coffee cooperative was 5.61 killometers and the average dividend amount received by member farmers was 26,230 Ethiopian birr.

7.5.   Explanatory Factor Analysis

Factor analysis refers to data reduction technique whereby large sets of data are taken and a way is found for reducing that data into a smaller set of factors or components (Pallant, 2011). Factor analyses are of two types: Explanatory factor analysis and confirmatory factor analysis. Exploratory factor analysis refers to a method of dropping items that are not aligned with others in the same construct (Ibid).

We used exploratory factor analysis to determine whether the items in the same constructs are aligned together since the method is widely used in most social science research (de Winter, Dodou, and Wieringa, 2009). According to Browne (2001), factor rotations can be either orthogonal or oblique. Varimax rotation was performed for each extraction method. Varimax is said to be a more appropriate method of reaching orthogonal simple structure by minimizing the number of variables that have high factor loading on each factor (Kline, 2011). The factorability of the data was assessed by using both Bartlett's test of sphericity and Kaiser-Meyer-Olkin (KMO).

Pallant (2011) stated that Bartlett's test of sphericity tests the null hypothesis that the correlation matrix is similar and the values provide a minimum acceptable standard that needs to be passed prior to factor analysis and it should be significant at p<0.05. The Kaiser-Meyer-Olkin (KMO) on the other hand tests the strength of the partial correlation coefficients among the items and KMO measure varies between 0 and 1 with values closer to 1 considered to be better. KMO value greater than 0.6 indicates that the correlation of the coefficients is good (Kaiser, 1974), and therefore the factor analysis of the variables is possible. Therefore, principal component factor analysis was used to examine the interrelations among the set of variables and determine the number of factors that can be used for further analysis (Pallant, 2011).

Table 7 below presents the result of explanatory factor analysis. The items consist of members' economic satisfaction (ESAT), trust (TRUST), cooperatives' opportunism (OPPOR), information sharing (INFO) and members' participation (PART). The output of factor analysis assigned the items to five factors that explained the total variance of 60.419%. Hair et al. (2010) suggested that factor loading of more than 0.40 are considered significant for the interpretive purposes. Accordingly, items with a factor loading of less than 0.4 were removed from further analysis and all factor loading ranges from 0.495 to 0.865, which is above the threshold requirements. The rotated factor matrix converged into five factors accounting for about 60.419%. of the variance in the data with an Eigen value of 1.385.

The value of Bartlett's test of sphericity was found to be $X^2 = 1521.718$, df = 210 and p< 0.01. In addition, Kaiser-Meyer-Olkin (KMO) showed a value of 0.791 (Appendix 6.1). This indicates that the items in a particular construct belong together (Tobias and Calson, 1969) and verifies a strong correlation among the measurement variables, which is enough to conduct factor analysis.

Table 7: **Factor Analysis Matrix**

Rotated Component Matrix[a]

Construct	Factor-1 ESAT	Factor-2 TRUST	Factor-3 OPPOR	Factor-4 INFO	Factor-5 PART
ESAT1	**.743**				
ESAT2	**.784**				
ESAT3	**.536**				
ESAT5	**.810**				
ESAT6	**.568**				
TRUST1		**.763**			
TRUST2		**.791**			
TRUST5_R		**.855**			
TRUST8		**.749**			
OPPOR1			**.778**		
OPPOR4			**.801**		
OPPOR5			**.768**		
OPOOR7			**.740**		
INFO1				**.865**	
INFO2				**.495**	
INFO3				**.833**	
INFO6				**.749**	
PART1					**.790**
PART3					**.585**
PART5					**.747**
PART8					**.790**
Eigen value	5.008	1.55	2.241	2.505	1.385

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Source: SPSS Output

7.6. Reliability Assessment

Reliability refers to whether scores to items on an instrument are internally consistent in terms of their responses across constructs, stability over time, and whether there was consistency in test administration and scoring (Creswell, 2009). It is an extent to which multiple measurements of a variable or a set of variables are consistent in terms of what they are designed to measure (Hair et al., 2010). Internal consistency approach is a very important tool in survey research to determine

whether variable cases work consistently before they are tested for validity (Mentzer and Flint, 1997).

Cronbach's alpha is the most widely used measure of internal consistency reliability (Peterson and Kim 2013). It is used to measure the average correlation among all of the indicators that make up the summed scale and the values range between 0 and 1 with values close to 1 indicating greater reliability (Pallant, 2011). A low Cronbach alpha shows that the sample poorly captures the construct used for measurement (Nunnally, 1967).

In order to test the internal consistency of data, we used Cronbach alpha (α) as suggested by Peterson and Kim (2013). The value of Cronbach alpha (α) for all the five items was found to be 0.728 demonstrating satisfactory construct reliability. Besides, composite reliability from confirmatory factor analysis (CFA) was computed on excel to further confirm the reliability of our data as recommended by Hair et al., (2010).

Table 8: Construct Reliability

Construct	Items	No. Of Items	Cronbach's (α)	Composite Reliability
ESAT	ESAT 1, 2,3,5,6	5	.783	0.793
TRUST	TRUST1,2,5,8	4	.817	0.82
OPPOR	OPPOR1,4,5,7	4	.810	0.81
INFO	INFO1,2,3,6	4	.769	0.789
PART	PART1,3,5,8	4	.741	0.752

Source: SPSS Output

Table 8 above depicts that the Cronbach's alpha coefficient for all the constructs is above 0.7. For ESAT α =0.783, TRUST α =0.817, OPPOR α =0.810, INFO α =0.769, PART α =0.741. The result of CR also exceeds 0.70 for all constructs which imply that good construct reliability. From this, it can be said that the data collection method for this study has strong reliability and internal consistency.

7.7. Validity Assessment

Validity refers to the degree to which the instrument used in a research study measures what it was supposed to measure (Kimberlin, and Winterstein, 2008). It is the extent to which measurement scale correctly represents the concept of study. There are four types of validity test: Content validity, construct validity, predictive validity and face validity (Hair et al. 2010). Content validity refers to whether the instrument really captures what it was intended to capture (Kimberlin, and

Winterstein, 2008). Face validity refers to the extent to which the content of observed variables is coherent with the definition of the latent construct based on researcher's own judgment (Hair et al., 2010).

Content validity and Face validity have been considered as the same (Mentzer and Flint, 1997). Predictive validity also known as Criterion validity refers to the validity that is based on some measures criteria that are supposed to measure the item that have been studied (Agle and Kelley, 2001). Construct validity refers to the extent to which observed variables accurately represent the theoretical unobserved construct that the variables are designed to capture in the first place (Hair et al., 2010; Churchill, 1979). It refers to the extent to which a construct measure the concept it is supposed to measure (Bagozzi, Yi, and Phillips 1991). The construct validity is assessed by examining its relationship with other constructs (both convergent validity and discriminant validity (Pallant 2011). In this study, we used construct validity measures to assess the validity of the items.

Construct validity

Construct validity can be established by investigating convergent and discriminant validity (Churchill, 1979) and both convergent and discriminant validity are robust in capturing the domain of construct validity (Dunn, Seaker and Waller, 1994).

Convergent validity

It refers to the degree to which a set of observed variables which represent a theoretical latent construct share the highest proportion of variance in common (Hair et al. 2010). It refers to the degree to which there is an agreement between different data sources and measurement methods on a construct that has been assessed (Agle and Kelley 2001). According to Mentzer and Flint (1997), convergent validity brings together several different items that measure the same construct and are related to one another. It implies that measurement scales correlate positively with other measurements of the same construct (Malhotra and Birks 2006).

In this study, explanatory factor analysis was used to measure the convergent validity of the data. The Explanatory factor analysis shows that the value of Bartlett's test of sphericity was found to be $X^2 = 1521.718$, df = 210 and p<0.01 (appendix 6.1). In addition, Kaiser-Meyer-Olkin (KMO) showed a value of 0.791. Principal components analysis revealed the presence of 5 components with factor loadings above 0.495 which is above the recommended threshold value of 0.4 (Hair et

al., 2010). This indicates that the items in a particular construct belong together (Tobias and Calson, 1969) and verifies the aconvergent validity of the data (Confer Table 7).

Discriminant Validity

Discriminant validity is the extent to which a measure does not correlate with other constructs from which it is supposed to vary. It implies the absence of correlation among differing constructs (Malhotra and Birks 2006). According to Fornell and Larcker (1981), Discriminant Validity refers to the degree to which a latent variable discriminates from other latent variables. It is the ability of an individual item to be able to differentiate the construct that have been studied from similar ones (Agle and Kelley 2001) so that the measure does not correlate highly to others that it is supposed to be different from.

The Explanatory factor analysis (EFA) depicted in table 7 above shows that individual items with high factor loadings loaded into factors, which corresponded to the conceptualized constructs. Kaiser-Meyer-Olkin (KMO) value was 0.791 and Bartlett's test of sphericity was significant at X^2 = 1521.718, df= 210 and p<0.01, which confirms the inter-item correlations are explained by common factors (Buvik and Haugland, 2005).

In addition to EFA, we run confirmatory factor analysis in AMOS 22 (appendix 3) and computed the average variance extracted (AVE) on excel from standardized factor loadings.

Table 9: Construct Correlation, Descriptive statistics, Discriminant validity and Average Variance Extracted

Factor	1	2	3	4	5	6	7	8
ESAT	1	.274**	.289**	-.433**	.242**	.196**	-.402**	.383**
TRUST		1	.169*	-.151*	.161*	.159*	-.067	.013
INFO			1	-.208**	.371**	.197**	.009	.066
OPPOR				1	-.084	-.310**	-.016	-.164*
PART					1	-.057	-.176*	.192**
OPPORxPART						1	.323**	-.049
DISTANCE							1	-.180*
DIVIDEND								1
AVE	0.542	0.535	0.520	0.450	0.503			
Mean	5.207	4.8613	5.0588	.0000	.0000	-.1046	5.61	26.23
S.D	1.1273	1.3316	1.07419	1.04408	1.19748	1.39986	3.687	19.71
Tolerance		.923	.845	.795	.797	.841	.914	.761
VIF		1.084	1.184	1.258	1.254	1.189	1.094	1.314

**.correlation is significant at the 0.01 level (2-tailed).
*.correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Output

As shown in table 9 above, except for the construct information sharing (INFO) with AVE of 0.45, the values for all the remaining constructs (ESAT, TRUT, OPPOR, PART) are >0.5 which is above the recommended criteria threshold (Hair et al., 2010). However, AVE values below 0.5 can still be accepted provided that the construct reliability is strong (Janssens et al., 2006). In line with the argument, INFO construct can be said discriminant valid as the reliability is high (α=0.768).

7.8.   Multicollinearity Assumption

Multicollinearity can be defined as the existence of a relationship between one independent variable and another independent variable for all independent variables used in a research model. Pallant (2011) argue that high correlation exists between the independent variables when r ≥0.9. The result of the correlation matrix (appendix 5) of this study shows that no values equal to or above 0.9 were found. We also used tolerance and variance inflation factor (VIF) in detecting the existence of multicollinearity. According to Pallant (2011), a tolerance value of less or equal to 0.1 indicates the existence of multicollinearity. On the other hand, the existence of VIF value greater or equal to 10 reveals the presence of multicollinearity. No tolerance value ≤ 0.1 and VFI value ≥10 was observed in this study (Confer Table 9).

The result of the correlation analysis depicted in table 9 above shows that all the items are significantly related to members' economic satisfaction. The Constructs are members' economic satisfaction (ESAT), trust (TRUST), opportunism (OPPOR), information sharing (INFO) and members' participation (PART).

7.9.   Assessment of Homoscedasticity

According to Pallant (2011), homoscedasticity is said to exist when predicted dependent variable residual scores have equal variance. Heteroscedasticity is indicated when the variance of errors differs at different values of the independent variable (Osborne and Waters 2002). If the assumption of homoscedasticity is not met (i.e. most of the residual scores do not lie in the middle), it indicates that the data are not normally distributed (Tabachnick and Fidell, 2007). In this study, standardized residuals scatter plot was used to assess the assumption of homoscedasticity. As shown in appendix 4.3 most of the residuals lie in the middle of the scatter plot, i.e. in between -2,5 and 2,5.

7.10. Assessment of the Hypothesized Measurement Model

We used confirmatory factor analysis to assess how well our hypothesized model fits the data. We employed AMOS 22 in order to run CFA and the result depicted in table 10 below confirms that an adequate fit of our model to the data. The result of CFA shows that all standardized loadings were significant at $p < 0.05$. The Chi-square statistic was found to be ($X^2 = 240.581$ $df = 179$, $p<0.01$) demonstrating unsatisfactory model fit resulting due to the sensitivity of Chi-square to sample size as suggested by Hair et al. (2010) and Kline (2011). Several previous studies used other goodness-of-fit indicators to assess the measurement model. The most widely used goodness-of-fit indicators are Tucker Lewis Index (TLI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA) and Adjusted Goodness of Fit Index (AGFI).

This study results show that all the other fit indices fulfill the acceptable threshold requirements (IFI and CFI ≥0.90 (Hair et al., 2010), RMSEA ≤ 0.8 (Sydorenko, 2012), AGFI >0.8 (Hair et al. 2010). The result of our CFA model fit shows that CFI = 0.955, IFI = 0.956, TLI = 0.947, RMESA = 0.042, AGFI = 0.868, which are all above the recommended threshold requirements. Besides the fit indices, the direction of the parameters shown on the CFA diagram confirms to our hypothesized model.

Table 10: Measurement Model Confirmatory Factor Analysis (CFA) Results (n=200)

Construct	Factor loading (t–value)[b]	Seven-point Likert-scale type items with end points strongly disagree and strongly agree (reversed for opportunism construct)
Members economic satisfaction, ESAT= 5 items. X^2=6.7, p= CFI=0.994, IFI=0.994, RMSEA = 0.04, α = 0.783, CR = 0.793	0.73[a]	ESAT6: Overall, I am satisfied with the way this cooperative does business as a firm.
	0.78(5.843)	ESAT5: I am satisfied at the price paid for my coffee product by this primary cooperative
	0.55(5.142)	ESAT3: This primary cooperative is a good choice for selling my product.
	0.75(5.917)	ESAT2: I am satisfied with the amount of cash dividend paid by this primary cooperative.
	0.45(5.799)	ESAT1: My membership with this primary cooperative has been very beneficial.
Trust, TRUST =4 items X^2 = 0.678, p=0.712, CFI=1.00,	0.69[a]	TRUST8: I rely on my cooperative's actions concerning my business.
	0.73(8.886)	TRUST5: There are times that I do not trust my cooperative.

IFI=1.005, RMSEA = 0.00 α= 0.817, CR=0.82	0.84(8.272)	TRUST2: My cooperative is very honest and truthful in setting prices for my coffee
	0.65(8.002)	TRUST1: My cooperative is trustworthy in transactions it makes with me.
Opportunism, OPPOR= 4 items X^2= 3.10, p=0.212, CFI= 0.996, IFI=0.996, RMSEA=0.053, α = 0.81, CR=0.81	0.77[a]	OPPOR7: My cooperative violates principles and values of this cooperative to their benefits.
	0.74(8.101)	OPPOR5: Sometimes my cooperative lie to me about the quality of coffee I supply in order to protect their interest.
	0.69(8.512)	OPPOR4: My cooperative has always not provided me with a completely truthful picture of sales transactions taking place within this cooperative.
	0.68(8.702)	OPPOR1: My cooperative does not pay me a fair price for coffee I supply.
Information Sharing, INFO =4 items X^2=6.86, p=0.032, CFI=0.98, IFI=0.98, RMSEA=0.11, α = 0.769, CR=0.789	0.90[a]	INFO6: My cooperative and I have regular communication about any change that helps my business grow.
	0.38(9.411)	INFO3: My cooperative shares all vital information that could affect our relationship.
	0.72(5.081)	INFO2: My cooperative communicates its expectation on the coffee quality that I produce
	0.71(10.342)	INFO1: My cooperative keeps me well informed about coffee price
Members Participation, PART= 4 items X^2=2.9, p=0.29, CFI=0.995, IFI=0.995, RMSEA=0.048, α= 0.741, CR=0.752	0.82[a]	PART8: I usually expose if I suspect misappropriation of the cooperative fund.
	0.45(7.584)	PART5: I participate in voting in every important decision that affects my business.
	0.67(5.399)	PART3: My voice always influences the group's decision-making process.
	0.68(8.155)	PART 1: I regularly attend general assembly meetings.

[a]Fixed variable,

[b] Standardized loadings significant at $p < 0.05$

Source: Amos Output, compiled by researchers

7.11. Summary of the Chapter

This chapter discussed the data examination and test of the measurement model. It has presented, evaluated and discussed the basic preliminary analysis such as assessing missing data, checking outliers, normality assessment and descriptive statistics. In addition, homoscedasticity and multicollinearity. The chapter has also presented exploratory factor analysis (EFA) and

confirmatory factor analyses (CFA) along with scale validity and reliability tests. The regression analysis and tests of the research hypotheses is presented in the next chapter.

CHAPTER EIGHT

HYPOTHESES TESTING AND EMPIRICAL FINDINGS

8.1. Introduction

This chapter presents the formulation and estimation of the regression model for testing our hypothesized relationships of variables. It deals with estimating the results from the hierarchical regression analysis and tests of the hypothesis.

8.2. Regression Model

In this study, hierarchical regression analysis was used to test the hypothesized model and estimate the effect of independent variables on the dependent variable. According to Petrocelli (2003), Hierarchical regression method is used to investigate the impact of several predictor variables in sequence such that the relative importance of a predictor evaluated on the basis of the value it adds to the prediction of a criterion. It has been used extensively to test the relationship between dependent and independent variables and also interaction effects (Buvik and Andersen 2015). Correlation investigation of variables in multiple regression analysis is essential as it is used to check if there is an interrelationship between the variables (Pallant, 2011).

In order to test our research hypotheses, the following regression model was estimated. This study assessed the main effect of trust (TRUST), Cooperatives' Opportunism (OPPOR) and Information Sharing (INFO) as well as the interaction effect of members' participation and cooperatives' opportunism (OPPORXPART) on members' economic satisfaction.

$$\text{ESAT} = b_0 + b_1\text{TRUST} + b_2\text{OPPOR} + b_3\text{INFO} + b_4\text{PART} + b_5\text{DISTANCE} + b_6\text{DIVIDEND} + b_7\text{OPPORxPART} + e \quad \text{...................Equation 8.1}$$

Where:
ESAT = Members' Economic Satisfaction   DIVIDEND= Dividend
TRUST=Trust b_0 = Constant
OPPOR = Cooperatives' Opportunism $b_1, b_2, b_3, b_4, b_5, b_6, 6_7$= Regression
INFO= Information Sharing   Coefficient
PART=Members' Participation   e = Error term
DISTNCE= Distance

8.3. Correlation matrix

Multicollinearity is the situation where one independent variable is highly correlated with another independent variable(s) and its existence tends to reduce the predictive ability of the regression model (Hair et al., 2010). The problem of multicollinearity means that what appear to be separate variables in the model are actually measuring the same concept (Kline, 2011). Pallant (2011) argue that high correlation exists between the independent variables when $r \geq 0.9$. The result of the correlation matrix of this study shows that no values are equal to or above 0.9 (table 11).

We also used tolerance and variance inflation factor (VIF) in detecting the existence of multicollinearity. According to Pallant (2011) and (Kline, 2011), a tolerance value of less than or equal to 0.1 indicates the existence of multicollinearity and VIF value of greater or equal to 10 reveals presence of multicollinearity. The correlation matrix in table 11 shows that the VIF of all the independent variables ranges from 1.084 to 1.314 and no tolerance value of ≤ 0.1 was observed in this study. From this analysis, we can draw a conclusion that multicollinearity is not a problem in our model.

In order to reduce multicollinearity problem among interacting independent variables, we mean-centered the interacting variables as suggested by Jaccard, Wan and Turrisi (1990), Rokkan, Heide and Wathne (2003), Buvik, Andersen and Gronhaug (2014). Centering of independent variables constituting interaction terms enhances more meaningful interpretation of the results (Robinson and Schumaker, 2009).

Table 11: Correlation Matrix, Descriptive Statistics and Collinearity Diagnostics

Factor	1	2	3	4	5	6	7	8
ESAT	1	.274**	.289**	-.433**	.242**	.196**	-.402**	.383**
TRUST		1	.169*	-.151*	.161*	.159*	-.067	.013
INFO			1	-.208**	.371**	.197**	.009	.066
OPPOR				1	-.084	-.310**	-.016	-.164*
PART					1	-.057	-.176*	.192**
OPPxPART						1	.323**	-.049
DISTANCE							1	-.180*
DIVIDEND								1
Mean	5.207	4.8613	5.0588	.0000	.0000	-.1046	5.61	26.23
S.D	1.1273	1.3316	1.07419	1.04408	1.19748	1.39986	3.687	19.71
Tolerance		.923	.845	.795	.797	.841	.914	.761
VIF		1.084	1.184	1.258	1.254	1.189	1.094	1.314

**.correlation is significant at the 0.01 level (2-tailed).
*.correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Output

8.4. Regression Analysis

This study used regression analysis that constitutes main effects, interaction effect and control effect. Hierarchical regression model describes the interpretation of main effect, interaction effect and control effect (Pallant, 2011). This is further explained by making a clear comparison between two separate regression models. The first model includes the main variables and the control variables (Model 1). Whereas, the second model consisted the independent variables, the control variables and interaction variable (Model 2). In order to compare and measure the strength of the two models, the value of F-change statistic and the difference in R^2 were used. This can be seen from appendix 6. Table 12 below portrays the results of the hierarchical multiple regression analysis. The analysis is based on dependent variables of members' economic satisfaction (ESAT); independent variables of trust (TRUST), cooperatives' opportunism (OPPOR), information sharing (INFO); control variables of dividend (DIVIDEND) and distance (DISTANCE) and an interaction term of members' participation and cooperatives' opportunism (OPPORXPART).

In the first model trust (TRUST), cooperatives' opportunism (OPPOR), information sharing (INFO) and control variables of dividend (DIVIDEND) and distance (DISTANCE) were regressed. In the second model an interaction term of members' participation (PART) was incorporated along with the main and control variables. The overall assessment of goodness of fit measures for model 1 was found to be satisfactory by indicating that 48% of the variance in cooperatives members' economic satisfaction is explained by the independent variables with $p < 0.05$, $R^2_{Adj} = 0.464$, $t = 9.925$, $F (6, 193) = 29.71$. Similarly, the overall assessment of goodness of fit for the second model is statistically significant indicating that 51% of the variance in cooperatives members' economic satisfaction is explained by the independent variables at $p < 0.01$, $R^2_{Adj} = 0.495$, $t = 10.826$, $F(7, 192) = 28.887$. This confirms that the model provides an adequate description of the data set.

The increased in R^2_{Adj} from $R^2_{Adj} = 0.464$ in Model 1 to $R^2_{Adj} = 0.495$ in model 2 is due to the existence of the interaction effect (OPPORxPART). The increase in the change in R^2 was 0.033. The existence of this interaction term in the regression equation of model 2 improved the model's overall explanatory power by 3.3% having an F-value of 12.93, $F(1,192)$. This suggests that our estimated model sufficiently predicts the interaction effects of members' participation and cooperatives' opportunism on members' economic satisfaction. The construct cooperatives'

opportunism and members' participation were mean-centered for the sake of handling the multicollinearity problem as suggested by Jaccard, Wan and Turrisi (1990).

Table 12: Hierarchical Regression Analysis

Coefficients[*]		Unstandardized Coefficients	Standardized Coefficients		Collinearity Statistics
Model		B	Beta	t -value	Tolerance/VIF
1	(Constant)	3.840		9.925	
	TRUST	.140	.165	3.082	.942/1.062
R^2=0.48	OPPOR	-.363	-.336	-6.208	.917/1.090
R^2_{Adj}= .464	PART	.013	.014	.243	.803/1.245
$F(6, 193)$=29.7[a]	INFO	.181	.173	3.012	.818/1.223
	DISTANCE	-.107	-.351	-6.535	.936/1.069
	DIVIDEND	.014	.248	4.578	.915/1.092
2	(Constant) (b_0)	4.237		10.826	
	TRUST(b_1)	.117	.138	2.632[a]	.923/1.084
R^2=0.513	OPPOR(b_2)	-.304	-.281	-5.129[a]	.845/1.184
	PART(b_3)	.033	.035	.612	.795/1.258
R^2_{Adj} = .495	INFO(b_4)	.148	.141	2.492[b]	.797/1.254
ΔR^2 =.033	DISTANCE(b_5)	-.126	-.414	-7.529[a]	.841/1.189
$F(7, 192)$=28.8[a]	DIVIDEND(b_6)	.015	.255	4.836[a]	.914/1.094
	OPPORxPART(b_7)	.167	.208	3.595[a]	.761/1.314

* Dependent variable: ESAT

[a]Significant at $p < 0.01$

[b]Significant at $p < 0.05$

Source: SPSS Output

8.5. Test of Hypotheses

By substituting the coefficient of the regression analysis in the regression model (Equation 8.1), the following regression equation was formulated:

$$\textbf{ESAT} = \textbf{4.237} + \textbf{0.117TRUST} - \textbf{0.304OPPOR} + \textbf{0.148INFO} + \textbf{0.033PART}$$
$$- \textbf{0.126DISTANCE} + \textbf{0.015DIVIDEND}$$
$$+ \textbf{0.167OPPORxPART} + \textbf{e} \qquad \text{……… Equation 8.2}$$

The above regression model represents the relationship between dependent variable: Economic Satisfaction (ESAT) and (i) independent variables: trust (TRUST), opportunism (OPPOR), information sharing (INFO) and participation (PART); (ii) control variable: distance (DISTANCE) and dividend (DIVIDEND); and (iii) one interaction term: opportunism and participation (OPPORxPART).

8.5.1. Hypothesis 1 – Trust and Members' Economic Satisfaction

The first hypothesis (H_1) is related to investigating the impact of trust on members' economic satisfaction, and the regression result shows that the association between trust and members' economic satisfaction is positive. In addition, the hypothesized effect of trust on members' economic satisfaction is significant ($b_1=0.117$, $t=2.632$; $p<0,01$). The result supports our hypothesis one. This implies that the more the members have trust on their primary cooperatives, the more economic satisfaction they get from their primary cooperative societies.

8.5.2. Hypothesis 2 – Cooperatives' Opportunism and Members' Economic Satisfaction

Hypothesis two (H_2) states that there is a negative association between cooperatives' opportunistic behavior and cooperative members' economic satisfaction. The objective of this hypothesis was to examine whether the opportunistic actions taken by cooperatives affects their members' economic satisfaction. Accordingly, the regression result shows that members' economic satisfaction and cooperatives' opportunism are negatively associated and the hypothesized effect of cooperatives' opportunism on members' economic satisfaction is significant ($b_2=-0.304$, $t=-5.129$; $p<0.01$). Hence, the result supports our second hypothesis. The finding indicates that as the ooperatives' opportunism behavior increases, the economic satisfaction of cooperative members' declines.

8.5.3. Hypothesis 3 – Cooperatives' Opportunism, Members' Participation and Members' Economic Satisfaction

Hypothesis three (H_3) corresponds to the two interaction terms between primary cooperatives' opportunism and members' economic participation (OPPORxPART). The result of the regression analysis, $b_7= 0.167$, $t=3.595$; $p<0.01$, demonstrates that the interaction terms are significant. The analysis strongly supports our hypothesis. The result implies that the negative association between cooperatives' opportunistic actions and members' economic satisfaction is significantly weakened when member's participation is high than when members' participation is low as participation in the affairs of cooperative reduces the primary cooperatives' opportunistic behavior.

Holmbeck (2002) states that the presence of a significant interaction explains that there is a significantly different association between the dependent and independent variables across the level of the moderator.

In order to further assess the interaction terms on the regression model mentioned on Equation 8.2 above, the partial derivative of cooperatives' opportunism (OPPOR) on members' economic satisfaction (ESAT) was developed. We considered the partial effect of the opportunistic behavior of primary coffee cooperative on cooperative members' economic satisfaction in the presence of members' participation. The partial derivative is as follows:

$$\frac{\delta ESAT}{\delta OPPOR} = b_2 + b_7 PART \qquad\qquad ……….Equation\ 8.3$$

According to the values indicated in equation 8.2 above, the coefficient values were substituted to equation 8.3. above and the results of the interaction derivative becomes as follows:

$$\frac{\delta ESAT}{\delta OPPOR} = -0.304 + 0.167 PART \qquad\qquad ……….Equation\ 8.4$$

Based on the result of equation 8.4 the partial derivative of members' economic satisfaction with respect to cooperatives' opportunistic behavior in consideration with the members' participation was plotted in Figure 8 below. The Figure illustrates that with the increasing level of members' participation in their cooperatives' affairs, the increasing consequence of cooperatives' opportunism on members' economic satisfaction reduces. In the other word, the members' participation in their primary cooperatives affairs brings more economic satisfaction by significantly reducing the effect of these cooperatives' opportunistic actions. This provides an empirical support for hypothesis three (H_3).

Figure 8: Effect of Opportunism on Members' Economic Satisfaction at Different Levels of Participation
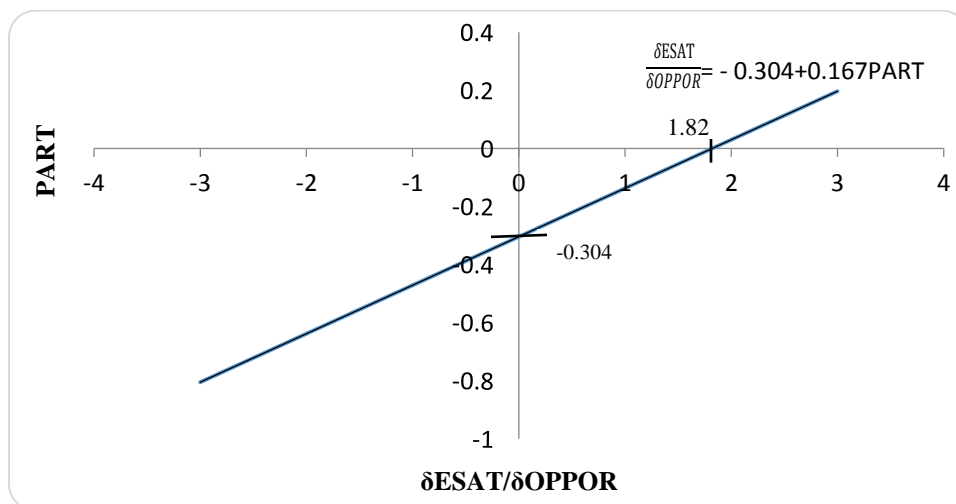
Source: Researchers' own drawing

A transformation strategy was considered to further examine the relationship between primary cooperatives' opportunistic actions and members' economic satisfaction with the existence of cooperative members' participation. We draw the interaction diagram by calculating the mean and standard deviation of the moderator (participation). To examine the interaction, the value of participation is selected by one standard deviation below the mean and one standard deviation above the mean to calculate simple slopes as suggested by Dawson (2013) and Preacher (2003) and these values were used to determine simple slopes. After determining the values, they were inserted into the prediction equation to get appropriate equations for each line. Low and high values of members' participation (PART) were calculated and used to plot the lines. The result of the regression analysis was used to plot the medium level of participation.

We have tested the significance of the slopes for these three different levels of participation by dividing the slope of each line to its corresponding value of the simple slope standard error value. Table 13 below presents the test of the slope.

Table 13: Results for the Slope of Members' Participation

Association between Opportunism and satisfaction	Participation		
	Low	Medium	High
Standardized regression	-0.504	-0.304	-0.104
Standard Error	0.064	0.059	0.095
t-values	-7.88	-5.15	-1.10

Source: Researchers' own computation

The above table depicts the significance of participation at three different levels. Low and medium levels of members' participation in the affairs of their coffee cooperatives have found to be strongly significant at $p < 0.01$ with t-values of -7.88 and -5.15 respectively. Whereas, High level of members' participation was found to be statistically insignificant with t-value of -1.10. This demonstrates that when members' participation is low, the effect of cooperatives' opportunism greatly reduced members' economic satisfaction, whereas as members' participation increases the effect that cooperatives' opportunism has on members' economic satisfaction declines

Figure 9: Effect of Primary Cooperatives opportunism on Members' Economic Satisfaction at Different Levels of Participation
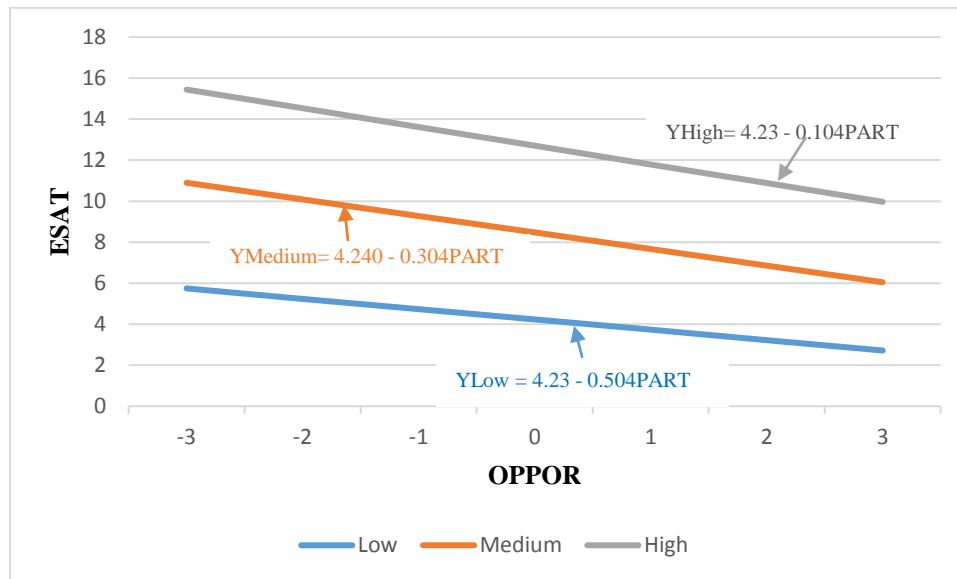
Source: Researcher's own drawing

Based on the results of the simple slope, a graph is depicted showing three different levels of members' participation (PART). These are a low, medium and high level of members' participation. Accordingly, Figure 9 was depicted illustrating the effect of primary cooperatives' opportunism on members' economic satisfaction at different levels of participation. The interaction effect of participation on members' economic satisfaction indicates that for the low level of members' participation the correlation between cooperatives' opportunism and members' economic satisfaction is high. However, with a high level of members' participation, the effect of cooperatives' opportunism over members' economic satisfaction reduces. That is, cooperatives' opportunistic actions over the members' economic satisfaction significantly reduces as members' participation increase resulting an increase in members' economic satisfaction. This provides further support for the presence of interaction effects (Hypothesis three (H_3)).

8.5.4. Hypothesis 4 – Information Sharing and Members' Economic Satisfaction

Hypothesis four (H_4) posited that there is a positive association between information sharing and members' economic satisfaction. The objective of this hypothesis was to examine whether the economic satisfaction of primary coffee cooperative members is affected by the information sharing practice of their cooperatives. The result of the regression analysis indicated that

information sharing (INFO) is positively associated with members' economic satisfaction (ESAT) at a significant level of $p<0.05$, with $b_3=0.148$ and $t=2.492$. Based on this result it could be said that information shared by the primary cooperatives with the members of cooperative contributes towards the economic satisfaction of the members. Hence, this reasoning supports hypothesis three (H_4) in our model.

8.5.5. Effects of Control Variables.

Distance

The distance of the primary cooperative from the members' farm (DISTANCE) seems to have a negative effect on members' economic satisfaction with $b_5=-0.126$, $t=-7.529$; $p<0.01$. It indicates that the more the members are far away from the primary cooperative societies, the less economically satisfied they are. For example, a cooperative member who is situated one kilometer away from his cooperative is more satisfied than a member who is located 10 kilometers away (Appendix 4.2). The result of this variable is in line with our projection.

Dividend

The findings demonstrate that there is a positive association between the dividend amount members receive (DIVIDEND) from their cooperative societies and Members' Economic satisfaction ($b_2 = 0.015$, $t = 3.595$, $p<0.01$). This indicates that the amount of dividend members receive from their cooperatives contributes positively to their satisfaction.

8.5.6. Summary of Hypotheses Test

The following table summarizes the hypotheses that are tested with their coefficient value, t-value and the finding.

Table 14: Summary of Hypotheses and Results

Hypothesis	Coefficient	t – value	Findings
H₁: There is a positive association between trust and members' economic satisfaction.	0.117	2.632	Supported
H₂: There is negative relationship between cooperatives' opportunism and member's satisfaction	-0.304	-5.129	Supported
H₃: The association between cooperatives' opportunism and members' economic satisfaction becomes less negatively shaped when the level pf participation increases.	0.167	3.595	Supported
H₄: There is a positive association between information sharing and members' economic satisfaction.	0.148	2.492	Supported

8.6. Summary of Chapter

Hierarchical multiple regression was used to test the hypothesized model of the study. The result indicates that all the four hypotheses formulated were strongly supported (i.e. H_1, H_2, H_3 and H_4). The next chapter presents a summary of the finding of the study vis-a-vis relevant theoretical literature, the theoretical and managerial implications; limitations of the study and recommendations for further research.

CHAPTER NINE

SUMMARY, DISCUSSION, IMPLICATIONS, LIMITATIONS AND FURTHER RESEARCH

9.1. Introduction

In the previous chapter, estimation of regression model parameters and hypotheses testing were carried out. This chapter presents summary and discussion of the key findings of the study based on the theoretical framework used in light of the research questions and objectives of this study. Theoretical and managerial implications are also presented. Furthermore, limitations of the study and recommendations for further research are pointed out.

9.2. Summary of the Findings

The main objective of this study is to examine the determinants of members' economic satisfaction with their cooperatives. The specific objectives involve investigating factors affecting members' economic satisfaction with their cooperatives and examining whether members' participation plays an important role as a moderator between opportunism and members' economic satisfaction.

The result from correlation matrix shows that trust, opportunism, information sharing and the interaction term are significantly related to members' economic satisfaction. The overall assessment of goodness of fit for the model is statistically significant at $p < 0.01$, $R^2 = 0.513$, $R^2_{Adj} = 0.495$, $t = 10.826$, $F_{(7, 192)} = 28.887$.

Four hypotheses were formulated in this study (H_1, H_2, H_3 and H_4) based on relevant theories and literature. The first hypothesis (H_1) was related to the association between trust and members' economic satisfaction in light of relational contracting theory. The result of hierarchical multiple regression confirms that the hypothesized association between trust and members' economic satisfaction is positive and significant at $p < 0.01$, $b_1 = 0.117$, $t = 2.632$. The second hypothesis (H_2) was to test a relationship between cooperative opportunism and members' economic satisfaction based on transaction cost theory. The multiple regression results indicate cooperative opportunism and members' economic satisfaction are negatively associated and was found to be statistically significant at $p < 0.01$, $b_2 = -0.304$, $t = -5.129$.

The third hypothesis (H_3) of the study was to test the interaction effect of members' participation between opportunism and members' economic satisfaction. According to the result of regression output, the interaction effect is significant at $p<0.01$, $b_7= 0.167$, $t= 3.595$ demonstrating that members' participation in decision making moderates the relationship between cooperatives' opportunism and members' economic satisfaction. Hypothesis four (H_4) was to test the association between information sharing and members' economic satisfaction. The result shows that the positive association between information sharing and members' economic satisfaction is statistically significant at $p<0.05$, $b_4= 0.148$, $t= 2.492$. The findings of the study strongly support all the hypotheses that were formulated on the ground of relational contract theory, transaction cost theory and agency theory. The control variables, i.e. distance and dividend were also found statistically significant as they were expected.

9.3. Discussions

Trust and member economic satisfaction

Marketing cooperatives exist to satisfy a variety of members' needs. The satisfaction of these needs is determined by various antecedents. Trust is among the most common variable that is critical in inter-organizational relationship; including determining relationship satisfaction (Palmatier et al., 2006). The findings of this study are theoretically consistent with previous studies regarding associations between trust and satisfaction. Several scholars have studied the association between trust and satisfaction in business-to-business relationships. To mention few studies conducted by Farrelly and Questar (2005); Schul, Little and Pride (1985) show that trust leads to satisfaction in the business relationship. Further, the positive association between trust and satisfaction has been empirically supported by researchers like (Chao 2014, Gorton et al. 2015, Hutchinson et al. 2011, Delbufalo 2012). Trust as an important determinant of satisfaction has been supported in this study. Trust was positively related to members' economic satisfaction at $p<0.01$, $b_1= 0.117$, $t= 2.632$.

It is not surprising that cooperative members believe in the ethical values of honesty (ICA, 1995) which is one of the dimensions explaining trust (Smith and Barclay 1997). The qualitative analysis of the focus group discussion (FGD) conducted with boards of directors of the cooperative also confirms this analysis. According to FGD participants, the members have a high level of trust on their cooperatives. The FGD participants from Fero primary coffee cooperative states that "knowing that their cooperative does not have a cash to pay for members at the time of coffee purchase, members still prefer to sell their coffee to their cooperative on credit basis than selling

to private investors on cash as they have high levels of trust on their cooperatives." Trust between cooperatives and cooperative members is, therefore, an important source of satisfaction for the members of cooperatives. Therefore, the relationship between cooperatives and that of the members must continue to be based on utmost good faith for the members to gain economic satisfaction from their membership in cooperatives.

Opportunism and members' economic satisfaction

The second hypothesis of this study was to test the association between cooperative opportunism and members' economic satisfaction. The negative association between opportunism and satisfaction was supported in this study and the association is significant at $p < 0.01$, $b_2 = -0.304$, $t = -5.129$. The finding is in line with (Anderson, 1988) that satisfaction is negatively associated with opportunism. In addition, Crosno and Dahlstrom (2010) finding support for the negative association between satisfaction and opportunism.

Opportunistic behavior may erode value creation (Morgan and Hunt, 1994); restrict trust-based relationships; or may affect other exchange outcomes negatively (Hawkins, Wittmann and Beyerlein, 2008). Buyer's opportunistic behaviors result in loss of confidence in obtaining anticipated mutual benefits in the future (Chung, 2012). This kind of opportunistic behavior creates risky situations resulting in decreased members' satisfaction as the members no longer trust their cooperatives.

The FGD conducted with members of BOD indicates that if members suspect of any opportunistic behavior by their cooperatives (such as an under weighting kilo of coffee they supplied), they report such cases to the district cooperative officials. Some farmers weigh the kilos at their home before delivering their coffee produce to the cooperative to minimize the opportunism behavior of cooperatives.

Opportunism, members' participation and members' economic satisfaction

The third hypothesis was to test the interaction effect of members' participation on the relationship between cooperatives' opportunism and members' economic satisfaction. The multiple regression results indicate that the interaction effect was significant at $p < 0.01$, $b_7 = 0.167$, $t = 3.595$ demonstrating that members' participation moderates the relationship between cooperatives' opportunism and members' economic satisfaction.

The main features of the relationship between the members and the cooperative are that the cooperative may engage in shirking or opportunistic behavior unless the members can select and control an effective board of directors, and gain access to relevant information. Jensen and Meckling (1976) suggest that principal needs to establish monitoring mechanisms that can ensure that agents behave in the best interest of the principal. It is important that members have mechanisms in order to protect themselves from the opportunistic behavior of professional managers and/or boards of directors so that they can reach a higher level of satisfaction with their cooperative.

The democratic member control principle of cooperative states that, cooperatives are democratic organizations controlled by their members, who actively participate in setting their policies and making decisions (ICA, 1995). Members participation in the management of cooperatives through regularly attending meetings, actively participating in electing capable directors, are shown to be good mechanisms for members to exercise general control over the activities of the cooperatives. Russo et al., (2000) argued that managers' power is inversely correlated to members' participation in the cooperative. Thus, the more active members are in the annual meetings and in the decision making of the cooperative, the less the managers behave opportunistically, enhancing members' satisfaction with their cooperatives.

Analysis from FGD indicates that general assembly is convened annually to discuss and make an important decision by members. Members are free to express their views during the meeting. The purpose of the meeting is to review the program and the business of cooperative for the past year, to decide on the allocation of dividend and reserve fund, to elect officers, and to plan future activities and approve budgets. The annual meeting gives members a chance to ask questions and offers suggestions. It provides management the opportunity to explain and discuss operating policies and listen to member views. A general assembly (annual meeting) is a legal requirement. The Ethiopian Cooperative Society Proclamation No. 147/1998 requires general assembly meeting as it is the supreme organ of the cooperative.

Despite the negative role of opportunism, active members' participation plays an important role in the relationship between cooperative and members. Because when there is high members' participation in the affairs of cooperatives, officers of cooperative tend to behave less opportunistically resulting in positive outcomes and prevent negative outcomes. In a nutshell, members' active participation reduces the negative effect of opportunism on members'

satisfaction. In other word, the negative effect of opportunism on members' satisfaction is weakened for a high level of members' participation. Thus, members' participation plays a buffering effect for the opportunism behavior of the cooperative officials. This buffering effect is stronger when members' participation is high. Therefore, it is crucial to encourage members' active participation in the affairs of their cooperatives in order to minimize the opportunistic behavior of managers and hence enhance members' economic satisfaction with their cooperatives.

Information sharing and member economic satisfaction

The last hypothesis has tried to test the association between information sharing and members' economic satisfaction. Hausman (2001) suggests communication to be an important antecedent to strengthen the relationship. Relationships that have developed the necessary environment for "free flow" of information are often the most satisfying for businesses (Diaz et al., 2002). Open and frequent communication is therefore very essential to the maintenance of these value-enhancing relationships (Paulraj, Lado and Chen, 2008). Members' perception of the extent to which timely and regular free flow of information sharing exists affect their satisfaction with their cooperatives. The importance of information sharing as a source of members' economic satisfaction was supported in this study at $p<0.05$, $b_4= 0.148$, $t= 2.492$. This finding is in line with (Glavee-Geo, 2012,). Yilmaz, Sezen and Kabadayı (2004) also stressed on the importance of honest and open communications for buyer satisfaction.

It is confirmed that the members' satisfaction with their cooperative increases as they have more information about the business activities, policies, plans & objectives of their cooperatives, marketing information and any other critical information that affect the relationship. Therefore, in order to satisfy cooperative members, it is important that they have reliable, timely and adequate information as much as possible. Sharing information reduces information asymmetry and leads to greater satisfaction of members by minimizing opportunistic behavior of the cooperatives. To this end, it is important to improve all channels of communications with cooperative members in order to ensure the free flow of information and thus increase members' satisfaction.

Analysis from the FGD indicates that their cooperatives are doing their best in communicating all the important information to their members. Information like coffees' current market price, new and improved way of coffee cultivation and harvesting, the quality of coffee they should produce

and usage of compost for their coffee plantation among others are communicated by the cooperatives.

9.4. Theoretical Implications

The focus of this study was on determinants of members' economic satisfaction with their cooperative. The study provides some contributions to the buyer-supplier relationship literature by studying satisfaction and its antecedents. Particularly, results show that trust has a positive influence on satisfaction, opportunistic behavior has negative influences on satisfaction and information sharing has a positive influence on satisfaction. This indicates that theoretically, the study has found support for trust, opportunism and information sharing as determinant variables and member satisfaction as the outcome variable. These results provide additional evidence for previous researches.

One important contribution of this study is the interaction effect of participation to reduce the negative effect of opportunism on satisfaction. The study found that participation plays a buffering effect for the opportunism behavior of the cooperatives. This buffering effect is stronger when members' participation is high in a sense that when there is high members' participation, the negative effect of opportunism on satisfaction is weakened than when members' participation is low and hence enhances relationship satisfaction. This argument holds true especially in a collective action like cooperatives where group decision making is an important feature. Active members' participation of members by making major decisions minimizes the likelihood of unethical behavior of the leaders of the cooperatives. In short, this study has contributed by investigating the moderating effect of members' participation on cooperatives' opportunism.

9.5. Managerial Implications

Satisfaction is significantly influenced by the quality of buyer-supplier relationship (Bagozzi, 1980). Having satisfactory buyer-seller relationship among the exchange partners is a possible guarantee for future business and pre-requisite for successful business performance. Benton and Maloni (2005) indicated that satisfaction is one of the overriding factors that affect how far exchange partners want to continue their business relationship in a business relationship. This study lays a foundation for identifying the determinant factors that have an impact on the economic satisfaction of members of primary cooperatives in their relationship with their cooperative.

The results of this study have important implications for owners, the board of directors and professional employees of primary coffee cooperative societies; Sidama Coffee Farmers Cooperative Union (SCFCU) and policy-makers in Federal Cooperative Agency of Ethiopia. This study offers insights on how to develop trust, curb opportunism and increase information sharing and how these variables influence the cooperatives members' economic satisfaction. In addition, it showed the role of participation in enhancing a business relationship. The following are practical contributions:

The finding of our study for the variable trust showed that it is highly significant in a cooperative – members relationship. The result may tell the following to both the cooperatives and their members. The primary coffee cooperative societies can enhance the relationship that it has with its owner members by developing a high level of trust. The cooperative should be trustworthy in all the activities that it has with its members. This can be explained by the transaction that the cooperatives make with its members and by the price that they give to its members in buying the coffee. The cooperatives should give the current market price or even better price for their coffee produce. The cooperative can develop trust in its members by maintaining the principles and values of the cooperatives. This gives the owner members to see that their cooperatives are operating in accordance with the specified principles and values.

Furthermore, to build up trust, the cooperatives can adopt helpful behavior towards members and show that it is reliable and competent in its everyday actions. Activities that put members in contact with one another and with cooperative managers and board members in a way that fosters a sense of good feeling and companionship may serve to enhance trust. We, therefore, recommend the boards of directors/managers of cooperatives to create the conditions, which generate cooperatives members' trust because this is an important source of members' economic satisfaction and also create favorable behaviors like members' active participation.

The finding of this particular variable also indicates for SCFCU that the same trustworthiness can be developed between the primary coffee cooperative societies and itself so that the business relationship can be enhanced and sustained. SCFCU should put trust in its primary coffee cooperative societies by being honest with the transaction it makes. In addition, the values and principles that these two exchange partners specified in their business relationship should be strictly followed. The development of trust in such relationship should be from both sides.

The other variable that has important managerial implication in the business relationship between the coffee cooperative societies and its members is opportunism. Suppliers satisfaction significantly reduces when buyers act opportunistically (Galvee-Gao, 2012). The result of the finding also shows that opportunistic actions taken by the primary cooperatives significantly reduce members' economic satisfaction. This indicates that so as to create smooth and enhanced relationship among these exchange partners the cooperatives should avoid violating principles and values of the cooperatives to their benefits; the cooperatives should provide a completely truthful picture of sales transactions taking place within the cooperatives and the cooperatives should pay a fair market price to the coffee the members supply among other things.

The finding of this study showed the importance of participation in curbing the opportunistic behavior of primary cooperatives societies in their business relationship. With high cooperatives members' participation in the affairs of their cooperatives, the negative effect of opportunistic actions of the cooperatives significantly reduce. Cooperatives members could participate in their business in the form of attending regular general assembly meetings; participating in voting in every important decision that affects their business and exposing if misappropriation of the cooperative fund is suspected. Both the primary coffee cooperative societies and their members should consider encouraging participation for the betterment of their business relationship. This study suggests that cooperatives members should actively participate in their cooperatives in order to reduce the opportunistic behavior of their cooperatives.

Untimely, unreliable and ineffective information flow among the exchange partners may result in unsatisfactory business relationship. The finding of our study with regard to information sharing in the relationship between primary cooperatives and their members showed that it is a key factor to enhance the members' economic satisfaction. In such relationship, the primary coffee cooperative societies need to make sure that they are playing an active role in transferring information to their members. This can be done by providing timely and up to date information about the coffee price; the expected quality of the coffee the farmers should produce and regular communication about all vital information concerning any changes that helps the business grow and affect the relationship among themselves and the members.

With regard to SCFCU, considering these variables helps a lot in enhancing the business relationship they have with the primary coffee cooperative societies. SCFCU administrators should see how trust can significantly affect the satisfaction of their members and consider developing

trust in all the business relationship they have with their cooperatives. As the same time, opportunistic actions made by any of the exchange partners in a business relationship affects their business relationship negatively and significantly. SCFCU and their primary coffee cooperative societies should work hard to reduce the opportunistic actions that exist in their business relationship. These partners should also consider exercising participation in their business relationship. Members' participation in all the activities that could affect their business relationship is very critical and helpful to increase both parties' satisfaction.

In addition, the result of this study revealed that exchanging information among the partners has a significant and positive impact on the satisfaction of their business relationship. All the necessary information that could affect their business relationships should be communicated among the two exchanging partners. Therefore, both SCFCU and their cooperatives under them should work together to enhance their satisfaction by increasing trust, reducing opportunism by increasing participations in the activities of their businesses' relationships and increased information sharing concerning all the issues that are relevant to their business relationships.

Furthermore, the policy makers in the Federal Cooperative Agency (FCA) can consider the result of the finding to be incorporated in their directives so as to strengthen the smooth business relationship between members and cooperatives so that coffee farmers can benefit from this relationship by getting access to the market, both in the domestic and international market.

9.6.   Limitations of the Study and Areas for Further Research

This study has a number of limitations that need to be addressed in further research. Satisfaction is not limited to the coffee cooperatives, it also exists in other types of cooperatives as well. For example, fish, vegetable, honey, credit and saving, tea, cotton, and others can also apply satisfaction. However, this study focused only on one type of cooperatives which is a coffee cooperatives. Making single industry analysis helps a researcher to come up with more specific, accurate and detailed information to make himself be familiar with the industry nature and relationship between key players of the industry and also provides a high degree of internal validity (farmers and buyers) (James and Singogo, 2013). Hence, implying the findings of this study to other industries would be difficult. Therefore, this indicates that there is a room for further research to be done on other industries.

This study has focused only on the relationship between primary coffee cooperative societies of SCFCU and their members, which is found only in the southern part of Ethiopia. However, there are six cooperative unions that are functioning in the coffee sector around the whole Ethiopia. Therefore, researchers can further study this concept on the other parts of the country by considering more than one cooperative union to have a better view of the findings.

The present study has focused on four relational drivers that have an effect on the suppliers (cooperative members') economic satisfaction, however, these variables that are investigated by this study are not exhaustive. Therefore, researchers may consider other relational drivers, including relationship duration, information asymmetry, and commitment among others. Investigating these and other factors may show more impact on members' satisfaction.

The findings of this study show different factors that have effects on cooperatives members' economic satisfaction in the relationship they have with their primary cooperative societies. i.e., the findings of this study show unilateral satisfaction. The study findings did not show bilateral satisfaction rather it was focused on the members' economic satisfaction only. Other researchers can work to investigative bilateral satisfaction in the business relationship that cooperatives and their members have.

Opportunism as an antecedent of member satisfaction was investigated from the side of cooperatives resulting negative and significant impact on the economic satisfaction of their members. However, researchers can consider opportunism variable in the opposite direction and see variables like free riding problems among members of cooperatives, members' opportunism behavior to determine relationship satisfaction.

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APPENDICES

Appendix 1: Questionnaire

Dear Respondents,

First of all, we would like to forward our greeting and express sincere gratitude and appreciation in advance for taking your time to respond to this interview schedule. We are currently studying MSC Logistics and Supply Chain Management at Molde University College-Specialized University in Logistic and conducting research entitled *Determinant of member's satisfaction with their cooperative: The case of Sidama Coffee Farmers Cooperative Union*. This Interview Schedule is designed in order to collect information about Determinant of member's satisfaction with their cooperative.

The first set of questions requires you to give a specific answer on the blank space provided and the second set of questions require you to circle the appropriate number that best represents your view on each statement. Any response given will be kept confidentially and wouldn't be used for any other purpose other than for the research work. Your participation in responding to the questions is extremely important for the success of this research work.

Thank you for your cooperation.

Instruction

 ➢ No need to write your Name
 ➢ Answer the questions by filling the blank space or by using **(X)** mark for your response

Part One
1. Name of your primary coffee cooperative: _____
2. Distance of your farm from primary cooperative: _____km/hr
3. The average kg/quintal of annual coffee production: _____Kg/quintal
4. The average annual sales of coffee to your primary cooperative: _____ Kg/quintal
5. How much money did you receive in the form of a dividend from your primary cooperative preceding year? _____Birr
6. How long have you been a member of this primary coffee cooperative? _____ Year/s

7. Have you sold coffee to private traders other than your cooperative in the preceding year?
       Yes [   ]   No [   ]
8. If your answer for the above question is "yes", state the number of alternative agents/buyers you sold your product: _____

To respond to the remaining questions please use the given scales from 1 to 7; where 1 represent strongly disagree up to 7 which represent strongly agree (and reversed for opportunism construct). You are kindly required to circle the number which best describes your answer for each question.

A. Basing on your primary coffee cooperative please circle the appropriate number that best represents your view regarding the following statements							
Items	Strongly Disagree					Strongly Agree	
1. My membership with this primary cooperative has been very beneficial to sell my coffee product	1	2	3	4	5	6	7
2. I am satisfied with the amount of cash dividend paid to me by this primary cooperative.	1	2	3	4	5	6	7
3. This primary cooperative is a good choice to sell my product.	1	2	3	4	5	6	7
4. I am very pleased with my decision to be a member and sell my product to this cooperative due to its ease of access to the market.	1	2	3	4	5	6	7
5. I recommend other farmers to become a member of this cooperative to benefit financially.	1	2	3	4	5	6	7
6. I am satisfied at the price paid to me for my coffee product by this primary cooperative.	1	2	3	4	5	6	7
7. Overall, I am satisfied with the way this cooperative does business as a firm.	1	2	3	4	5	6	7
8. My membership with this primary cooperative has been very beneficial to sell my coffee product	1	2	3	4	5	6	7

B. Basing on your primary coffee cooperative please circle the appropriate number that best represents your view regarding the following statements							
Items	Strongly Agree					Strongly Disagree	
1. My cooperative does not pay me a fair price for coffee I supply.	1	2	3	4	5	6	7
2. My cooperative has benefited from my membership to this cooperative by providing misinformation.	1	2	3	4	5	6	7
3. My cooperative is not always sincere about the correct payment of my dividend.	1	2	3	4	5	6	7
4. Sometimes my cooperative lie to me about the quality of coffee I supply in order to protect their interest.	1	2	3	4	5	6	7

5. My cooperative has always not provided me with a completely truthful picture of sales transactions taking place within this cooperative.	1 2 3 4 5 6 7
6. Sometimes my cooperative changes the weighing scale slightly in order to get what they want.	1 2 3 4 5 6 7
9. The management violates principles and values of this cooperative to their benefits.	1 2 3 4 5 6 7
9. Sometimes my cooperative promise to do things without actually doing them.	1 2 3 4 5 6 7

C. Basing on your primary coffee cooperative please circle the appropriate number that best represents your view regarding the following statements

Items	Strongly Disagree Strongly Agree
1. My cooperative is trustworthy in the transactions it makes with me.	1 2 3 4 5 6 7
1. My cooperative is very honest and truthful in setting up prices for my produce.	1 2 3 4 5 6 7
2. My cooperative is working to maximize the welfare of my business.	1 2 3 4 5 6 7
3. I believe and trust the information provided by my cooperative.	1 2 3 4 5 6 7
4. There are times that I do not trust my cooperative (R).	1 2 3 4 5 6 7
5. I trust my cooperative and I am happy with the decisions that the cooperative makes.	1 2 3 4 5 6 7
6. I trust my cooperative to pay me dividend on time.	1 2 3 4 5 6 7
7. I rely on my cooperative's actions concerning my business.	1 2 3 4 5 6 7

D. Basing on your primary coffee cooperative please circle the appropriate number that best represents your view regarding the following statements

Items	Strongly Disagree Strongly Agree
1. I regularly attend general assembly meetings.	1 2 3 4 5 6 7
2. I actively participate in the training program.	1 2 3 4 5 6 7
3. My voice always influences the group's decision-making process.	1 2 3 4 5 6 7
4. I usually attend activities which are not obligatory for the members.	1 2 3 4 5 6 7
5. I participate in voting in every important decision that affects my business.	1 2 3 4 5 6 7

6. I have an opportunity to participate in the appraisal of the board members' performance.	1	2	3	4	5	6	7
7. I always express my ideas during meetings.	1	2	3	4	5	6	7
8. I usually expose if I suspect misappropriation of the cooperative fund.	1	2	3	4	5	6	7

E. Basing on your primary coffee cooperative please circle the appropriate number that best represents your view regarding the following statements							
Items	Strongly Disagree					Strongly Agree	
1. My cooperative keeps me well informed about the market situation.	1	2	3	4	5	6	7
2. My cooperative communicates his/her expectation on the coffee quality that I produce.	1	2	3	4	5	6	7
3. My cooperative shares all vital information that could affect the decision I had to me with our relationship.	1	2	3	4	5	6	7
4. My cooperative is willing to inform me about fertilizers to be used in coffee production.	1	2	3	4	5	6	7
5. My cooperative is willing to inform me about pesticides to be used in coffee production.	1	2	3	4	5	6	7
6. My cooperative and I have regular communication about any change that helps my business grow.	1	2	3	4	5	6	7
7. My cooperative supplies me technical information.	1	2	3	4	5	6	7
8. My cooperative supply me strategic information.	1	2	3	4	5	6	7

የጥናታዊ ጽሁፍ መጠይቅ

ይህ መጠይቅ የተዘጋጀው የጥናታዊ ጽሁፍ መረጃ ለማጠናቀር ሲሆን ከመጠይቁ የሚገኙት ምላሾች በጥንቃቄና ሚስጢራዊነቱ በተጠበቀ መንገድ የሚሞላና የሚቀመጥ ነው። ይህን ግምት ውስጥ በማስገባት መጠይቁን ሲሞሉ በነጻነትና በትክክለኛ መንገድ እንዲሞሉ በአክብሮት ስንጠይቅ፣ መጠይቁን በመሙላት ለምታደርጉት ቀና ትብብር በቅዬሚያ በእኛና በዩንቨርስቲው ስም እናመሰግናለን።

አንድነት አስመላሽ እና ጋሪ ኩመታ; Molde University College: Specialized University in Logistics, Norway

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1. የመሠረታዊ ሕብረት ሥራ ማሕበሮዖ ስም: _____

2. የዚህ መሠረታዊ ሕብረት ሥራ ማሕበር አባል ከሆኑ ምን ያህል ግዜ ሆኖዎታል? (በዓመት) _____

3. የቡና እርሻዖ ከመሠረታዊ ሕብረት ሥራ ማሕበሮዖ የሚገኝበት ርቀት (በኪ..ሜ/በሰዓት): _____

4. በባለፈው ዓመት ምን ያህል ቡና አምርተዋል? (በኪ..ግ/በኩንታል)፦ _____

5. ለመሠረታዊ ሕብረት ሥራ ማሕበሮዖ በባለፈው ዓመት ምን ያህል ቡና ሸጠዋል? (በኪ..ሜ/በሰዓት) _____

6. ከመሠረታዊ ሕብረት ሥራ ማሕበሮዖ ከቡና ሽያጭ ትርፍ ክፍፍል በባለፈው ዓመት ምን ያህል አግኝተዋል? _____

7. ከመሠረታዊ ሕብረት ሥራ ማሕበሮዖ በተጨማሪ ሌላ ደንበኛ በባለፈው አመት ቡና ሸጠው ነበር?

     አዎ _____   አይደለም _____

8. ለጥያቄ ቁጥር 7 ምላሾ አዎ ከሆነ ለስንት ደንበኞች ቡና ሸጠው ነበር?_____

A. የሚከተሉትን የመለኪያ መስፈርቶችን በመጠቀም እርስዖ ከመሠረታዊ ሕብረት ሥራ ማሕበሮዖ ጋር ያለ'ትን ግንኙነት የሚገልጸውን ቁጥር በመክበብ ስምምነቶን ይግለጹ።	በጣም አልስማማም				በጣም እስማማለሁ		
1. ከመሠረታዊ ሕብረት ሥራ ማሕበሬ ጋር ያለኝ ግንኙነት በጣም አዋጭ/ጠቃሚ ነው።	1	2	3	4	5	6	7
2. ከመሠረታዊ ሕብረት ሥራ ማሕበሬ በማገኘው የትርፍ ገንዘብ ክፍያ ደስተኛ ነኝ።	1	2	3	4	5	6	7
3. ይህ መሠረታዊ ሕብረት ሥራ ማሕበር የቡና ምርቴን ለመሸጥ ትክክለኛ ምርጫዬ ነው።	1	2	3	4	5	6	7
4. የመሠረታዊ ሕብረት ሥራ ማሕበሬ ለቡና ምርት ሽያጭ በሚያደርገው ያከፋፈል ሥርዓት ደስተኛ ነኝ።	1	2	3	4	5	6	7
5. ሌሎች የቡና አምራች ገበሬዎች የዚህ መሠረታዊ ሕብረት ሥራ ማሕበር አባል እንዲሆኑ እመክራለሁ።	1	2	3	4	5	6	7
6. ከዚህ መሠረታዊ ሕብረት ሥራ ማሕበር በሚከፈለኝ የቡና ዋጋ ደስተኛ ነኝ።	1	2	3	4	5	6	7
7. ባጠቃላይ ይህ የመሠረታዊ ሕብረት ሥራ ማሕበር እንደ ድርጅት በሚያደርገው እንቅስቃሴ ደስተኛ ነኝ።	1	2	3	4	5	6	7

B. የሚከተሉትን የመለኪያ መስፈርቶችን በመጠቀም ከመሠረታዊ ከመሠረታዊ ሕብረት ሥራ ማህበሮም ጋር ያሉትን ግንኙነት የሚገልጸውን ቁጥር በመክበብ ስምምነቶን ይግለጹ።	በጣም እስማማለሁ					በጣም አልስማማም	
1. መሠረታዊ ሕብረት ሥራ ማህበሩ ለማቀርበው የቡና ምርት ተመጣጣኝ ክፍያ አይከፍለለኝም።	1	2	3	4	5	6	7
2. የመሠረታዊ ሕብረት ሥራ ማህበሩ ከእኔ የሚገዛውን የቡና ኪሎ መጠን በመቀነስ በአባልነቴ ተጠቅሞብኛል።	1	2	3	4	5	6	7
3. የመሠረታዊ ሕብረት ሥራ ማህበሩ የሚያደርገው የትርፍ ገንዘብ ክፍፍል ሁልግዜ በጎለጽ አይደለም ።	1	2	3	4	5	6	7
4. አንዳንዴ የመሠረታዊ ሕብረት ሥራ ማህበሩ የራሳቸውን ጥቅም ለማሟሟላት ሲሉ የማቀርበውን የቡና የጥራት ደረጃ ያሳስታሉ።	1	2	3	4	5	6	7
5. የመሠረታዊ ሕብረት ሥራ ማህበሩ ስለሚያደርገው የቡና ሽያጭ ሁልግዜ የተሟላና ትክክለኛ የሆነ መረጃ አያቀርብልኝም።	1	2	3	4	5	6	7
6. አንዳንዴ የመሠረታዊ ሕብረት ሥራ ማህበሩ ከእኔ የሚገዛውን የቡና ኪሎ መጠን በማሳሳት ለራሳቸው ጥቅም ያውላሉ።	1	2	3	4	5	6	7
7. የመሠረታዊ ሕብረት ሥራ ማህበሩ የድርጅቱን መርሀና እሴቶች ለራሳቸው ጥቅም ሲሉ ይጥሳሉ።	1	2	3	4	5	6	7
8. አንዳንዴ የመሠረታዊ ሕብረት ሥራ ማህበሩ የራሳቸውን ጥቅም ለማሟላት ሲሉ የማይሰሩትን ሥራ እንስራለንን ብለው ቃል ይገባሉ።	1	2	3	4	5	6	7

C. የሚከተሉትን የመለኪያ መስፈርቶችን በመጠቀም ከመሠረታዊ ከመሠረታዊ ሕብረት ሥራ ማህበሮም ጋር ያሉትን ግንኙነት የሚገልጸውን ቁጥር በመክበብ ስምምነቶን ይግለጹ።	በጣም አልስማማም	በጣም እስማማለሁ					
1. የመሠረታዊ ሕብረት ሥራ ማህበሩ ከእኔ ጋር በሚያደርገው ግብይይት ታማኝ ነው።	1	2	3	4	5	6	7
2. የመሠረታዊ ሕብረት ሥራ ማህበሩ ለማቀርበው የቡና ምርት ትክክለኛና ታማኝ ዋጋ ያቀርብልኛል።	1	2	3	4	5	6	7
3. የመሠረታዊ ሕብረት ሥራ ማህበሩ የድርጅቴን አቅም ለማጎልበት በታማኝነት እየሰራ ነው።	1	2	3	4	5	6	7
4. የመሠረታዊ ሕብረት ሥራ ማህበሬ የሚያቀርብልኝን መረጃ ትክክለኛነቱን አምናለሁ።	1	2	3	4	5	6	7
5. አንዳንዴ የመሠረታዊ ሕብረት ሥራ ማህበሬን የማላምንበት ግዜ አለ።	1	2	3	4	5	6	7
6. የመሠረታዊ ሕብረት ሥራ ማህበሬን ስለማምን እነን ወክሎ ውሳኔችን እንዲያደርግ እፈቅድለታለሁ።	1	2	3	4	5	6	7
7. የመሠረታዊ ሕብረት ሥራ ማህበሬ የትርፍ ገንዘብ ክፍያዬን በስዓቱ እንደሚከፍለኝ አምንዋለሁ።	1	2	3	4	5	6	7
8. የመሠረታዊ ሕብረት ሥራ ማህበሬ ድርጅቴን አስመልክቶ በሚያደርገው እንቅስቃሴዎች እተማመናለሁ።	1	2	3	4	5	6	7

D. የሚከተሉትን የመለኪያ መስፈርቶችን በመጠቀም ከመሠረታዊ ከመሠረታዊ ሕብረት ሥራ ማሕበሮዎ ጋር ያሉትን ግንኙነት የሚገልጸውን ቁጥር በመክበብ ስምምነቶን ይግለጹ፡፡	በጣም አልስማማም				በጣም እስማማለሁ		
1. በጠቅላላ ጉባኤ ስብሰባ ላይ ሁልጊዜ እሳተፋለሁ፡፡	1	2	3	4	5	6	7
2. በመሠረታዊ ሕብረት ሥራ ማሕበሩ በሚሰጡ ሥልጠናዎች ላይ በንቃት እሳተፋለሁ፡፡	1	2	3	4	5	6	7
3. በመሠረታዊ ሕብረት ሥራ ማሕበሩ በሚደረጉ የውሳኔ ሂደቶች ላይ የእኔ ድምጽ ሁልጊዜ ተጽዕኖ ይፈጥራል፡፡	1	2	3	4	5	6	7
4. የአባላቾች መገኘት ግዴታ ባልሆኑባቸው የመሠረታዊ ሕብረት ሥራ ማሕበሩ እንቅስቃሴዎች ላይ ባብዛኛው ግዜ እሳተፋለሁ፡፡	1	2	3	4	5	6	7
5. በመሠረታዊ ሕብረት ሥራ ማሕበሩ በሚደረጉ ውሳኔዎች ሁሉ ላይ ድምጽ በመስጠት እሳተፋለሁ፡፡	1	2	3	4	5	6	7
6. የመሠረታዊ ሕብረት ሥራ ማሕበሩን የቦርድ አባላት የሥራ አፈጻጸም ግምገማ ላይ እሳተፋለሁ፡፡	1	2	3	4	5	6	7
7. በመሠረታዊ ሕብረት ሥራ ማሕበሩ በሚደረጉ ስብሰባዎች ላይ ሁልጊዜ ሀሳቤን እገልጻለሁ፡፡	1	2	3	4	5	6	7
8. የመሠረታዊ ሕብረት ሥራ ማሕበሩን ገንዘብ ያለአግባብ ሲመዘበር ለሚመለከተው አካል አሳውቃለሁ፡፡	1	2	3	4	5	6	7

E. የሚከተሉትን የመለኪያ መስፈርቶችን በመጠቀም ከመሠረታዊ ከመሠረታዊ ሕብረት ሥራ ማሕበሮዎ ጋር ያሉትን ግንኙነት የሚገልጸውን ቁጥር በመክበብ ስምምነቶን ይግለጹ፡፡	በጣም አልስማማም				በጣም እስማማለሁ		
1. የመሠረታዊ ሕብረት ሥራ ማሕበሬ ገበያ ላይ ስላለው የቡና ዋጋ ያሳውቀኛል፡፡	1	2	3	4	5	6	7
2. የመሠረታዊ ሕብረት ሥራ ማሕበሬ ማምረት ስለሚኖችብኝ የቡና ጥራት ያሳውቀኛል፡፡	1	2	3	4	5	6	7
3. የመሠረታዊ ሕብረት ሥራ ማሕበሩን እና የእኔን የሥራ ግንኙነት የሚነኩ መረጃዎችን ከመሠረታዊ ሕብረት ሥራ ማሕበሬ አገኛለሁ፡፡	1	2	3	4	5	6	7
4. ከመሠረታዊ ሕብረት ሥራ ማሕበሬ በቡና እርሻዬ ላይ መጠቀም ስላለብኝ ማዳበሪያ መረጃዎችን አገኛለሁ፡፡	1	2	3	4	5	6	7
5. ከመሠረታዊ ሕብረት ሥራ ማሕበሬ በቡና እርሻዬ ላይ መጠቀም ስላለብኝ የተባይ መከላከያ መረጃዎችን አገኛለሁ፡፡	1	2	3	4	5	6	7
6. ሁልጊዜ የእኔን የቡና ምርት ላማሳደግ የሚረዱ ለውጦችን የመሠረታዊ ሕብረት ሥራ ማሕበሬ ያሳውቀኛል፡፡	1	2	3	4	5	6	7
7. የመሠረታዊ ሕብረት ሥራ ማሕበሬ ስለሚያደርገው የግብይይት ክንውኖች መረጃዎችን ያቀርብልኛል፡፡	1	2	3	4	5	6	7
8. የመሠረታዊ ሕብረት ሥራ ማሕበሬ የረጅም ግዜ እቅዶችን/ስልቶችን የሚመለከት መረጃዎችን ያቀርብልኛል፡፡	1	2	3	4	5	6	7

Appendix 2: Explanatory Factor Analysis

Appendix 2.1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,791
Bartlett's Test of Sphericity	Approx. Chi-Square	1521,718
	df	210
	Sig.	,000

Appendix 2.2: Total Variance Explained

Comp onent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulati ve %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulati ve %
1	5,008	23,847	23,847	5,008	23,847	23,847	2,679	12,757	12,757
2	2,505	11,927	35,774	2,505	11,927	35,774	2,625	12,499	25,255
3	2,241	10,671	46,445	2,241	10,671	46,445	2,618	12,464	37,720
4	1,550	7,380	53,826	1,550	7,380	53,826	2,459	11,712	49,431
5	1,385	6,593	60,419	1,385	6,593	60,419	2,307	10,987	60,419
6	1,186	5,649	66,068						
7	,935	4,454	70,522						
8	,687	3,272	73,793						
9	,659	3,136	76,930						
10	,622	2,962	79,892						
11	,562	2,677	82,569						
12	,531	2,527	85,095						
13	,455	2,166	87,262						
14	,407	1,936	89,198						
15	,394	1,874	91,072						
16	,370	1,762	92,834						
17	,360	1,715	94,548						
18	,341	1,625	96,173						
19	,310	1,476	97,650						
20	,265	1,264	98,914						
21	,228	1,086	100,000						

Extraction Method: Principal Component Analysis.

Appendix 2.3: Rotated Component Matrix[a]

	Component				
	1	2	3	4	5
ESATIS1	**,743**	,119	-,153	,150	,074
ESATIS2	**,784**	,071	-,144	,118	,184
ESATIS3	**,536**	,204	-,297	,033	,042
ESATIS5	**,810**	,070	-,131	,111	,034
ESATIS6	**,568**	,033	-,104	,050	,070
TRUST1	,162	**,763**	,028	,096	-,003
TRUST2	,084	**,791**	-,124	,075	,020
TRUST5_R	,093	**,855**	-,014	-,006	,087
TRUST8	,049	**,749**	-,084	,060	,105
OPPOR1	-,206	-,053	**,778**	-,119	,050
OPPOR4	-,173	,023	**,801**	-,058	,010
OPPOR5	-,163	-,055	**,768**	,038	-,115
OPOOR7	-,140	-,109	**,740**	-,140	-,002
INFO1	,106	,054	-,119	**,865**	,144
INFO2	,153	,087	-,016	**,495**	,143
INFO3	,072	,101	,029	**,833**	,127
INFO6	,068	-,021	-,181	**,749**	,140
PART1	,065	,082	-,016	,218	**,790**
PART3	,167	,009	-,023	,110	**,585**
PART5	,029	,106	-,034	,201	**,747**
PART8	,069	,019	,012	,034	**,790**

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Appendix 3: Confirmatory Factor Analysis Model Fit (n=200)
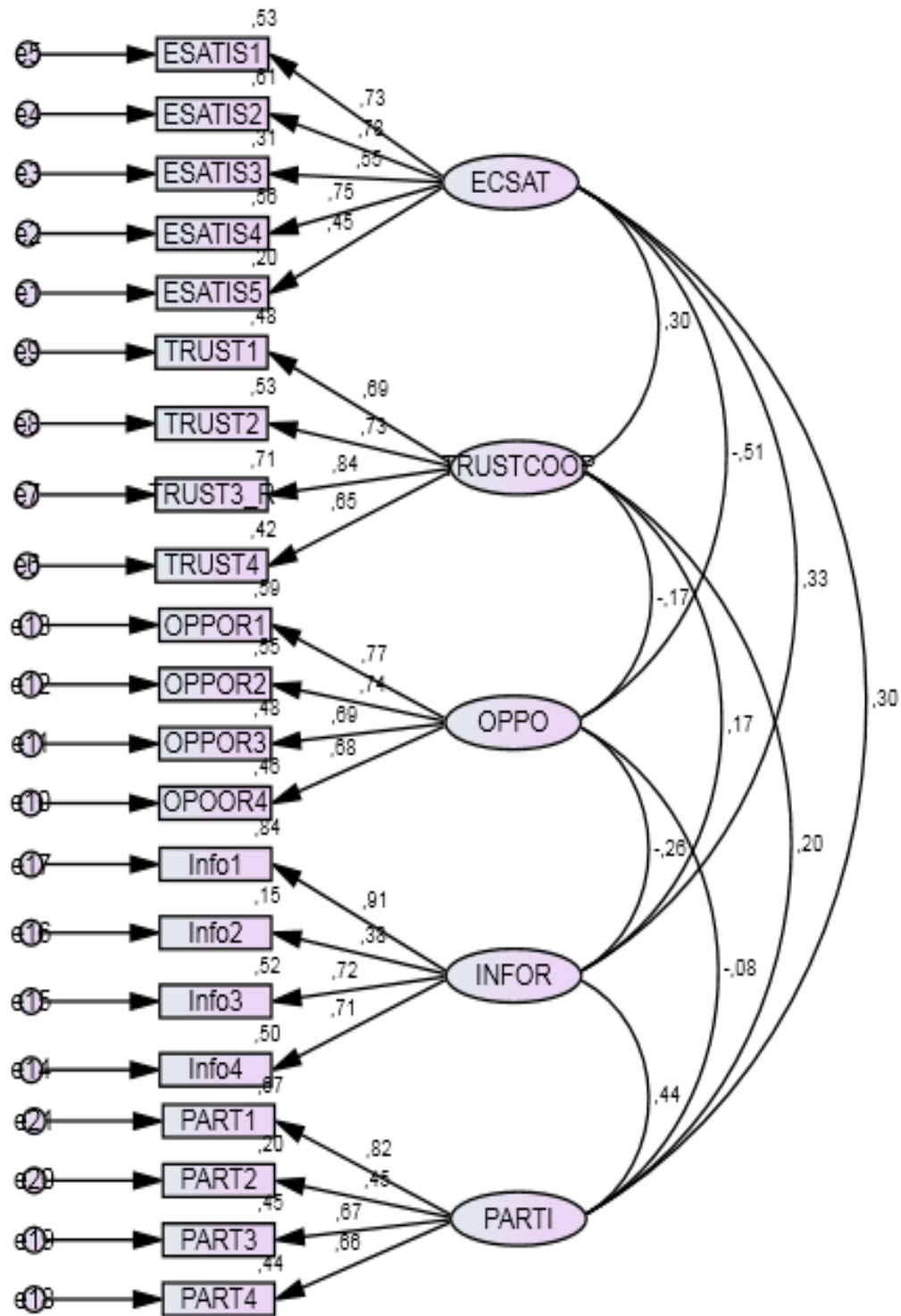
Appendix 4: Normality Assessment

Appendix 4.1: Descriptive Statistics of Constructs

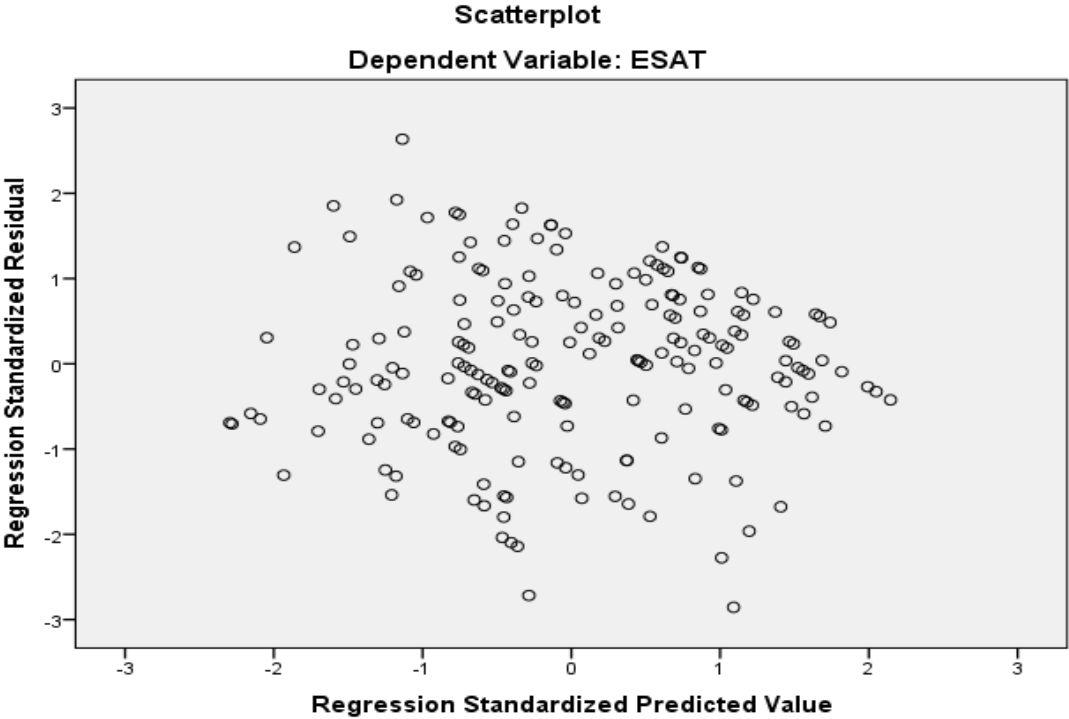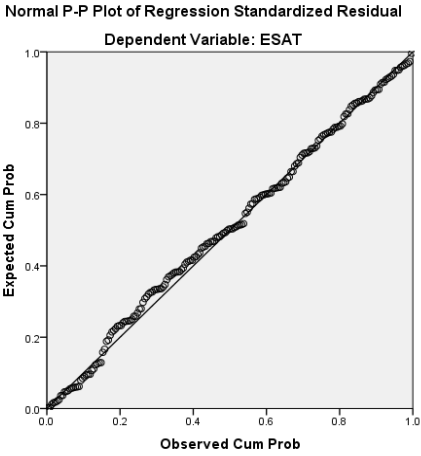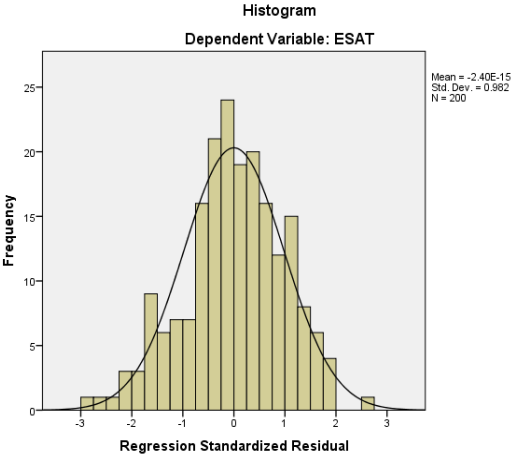|	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
ESATIS1	200	2	7	5,27	1,546	-,510	,172	-,794	,342
ESATIS2	200	2	7	5,25	1,420	-,525	,172	-,579	,342
ESATIS3	200	1	7	5,43	1,535	-,902	,172	,114	,342
ESATIS5	200	1	7	4,75	1,773	-,484	,172	-,981	,342
ESATIS6	200	2	7	5,33	1,401	-,626	,172	-,317	,342
TRUST1	200	1	7	4,80	1,675	-,581	,172	-,349	,342
TRUST2	200	1	7	5,03	1,558	-,575	,172	-,649	,342
TRUST5_R	200	1	7	4,92	1,739	-,555	,172	-,735	,342
TRUST8	200	1	7	4,69	1,655	-,541	,172	-,362	,342
OPPOR1	200	2	7	4,35	1,283	,028	,172	-,965	,342
OPPOR4	200	2	7	4,31	1,292	,106	,172	-1,040	,342
OPPOR5	200	2	7	4,21	1,352	,083	,172	-1,097	,342
OPOOR7	200	2	7	4,30	1,304	,105	,172	-,999	,342
INFO1	200	2	7	5,04	1,394	-,243	,172	-,783	,342
INFO2	200	2	7	5,05	1,372	-,341	,172	-,494	,342
INFO3	200	2	7	5,07	1,414	-,428	,172	-,553	,342
INFO6	200	2	7	5,09	1,408	-,358	,172	-,620	,342
Valid N (listwise)	200								

Appendix 4.2: Descriptive Statistics of Constructs

	N	Minimum	Maximum	Mean	Std. Deviation
ESAT	200	2.60	7.00	5.2070	1.12734
TRUST	200	1.75	7.00	4.8612	1.33156
OPPOR	200	2.00	7.00	4.2937	1.04408
INFO	200	2.25	7.00	5.0588	1.07419
PART	200	1.25	7.00	4.7375	1.26802
DISTANCE	200	1	10	5.61	3.687
DIVIDEND	200	10	190	26.23	19.710
Valid N (listwise)	200				

Appendix 4.3: Residual Scatter Plot

Histogram
Dependent Variable: ESAT

Mean = -2.40E-15
Std. Dev. = 0.982
N = 200

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: ESAT

Scatterplot
Dependent Variable: ESAT

Appendix 5: Correlation Matrix

		ESAT	TRUST	INFO	OPPOR	PART	OPPOR x PART	DISTANCE	DIVIDEND
ESAT	Pearson Correlation	1	.274**	.289**	-.433**	.242**	.196**	-.402**	.383**
	Sig. (2-tailed)		.000	.000	.000	.001	.005	.000	.000
	N	200	200	200	200	200	200	200	200
TRUST	Pearson Correlation	.274**	1	.169*	-.151*	.161*	.159*	-.067	.013
	Sig. (2-tailed)	.000		.017	.033	.023	.024	.347	.860
	N	200	200	200	200	200	200	200	200
INFO	Pearson Correlation	.289**	.169*	1	-.208**	.371**	.197**	.009	.066
	Sig. (2-tailed)	.000	.017		.003	.000	.005	.903	.354
	N	200	200	200	200	200	200	200	200
OPPOR	Pearson Correlation	-.433**	-.151*	-.208**	1	-.084	-.310**	-.016	-.164*
	Sig. (2-tailed)	.000	.033	.003		.237	.000	.817	.020
	N	200	200	200	200	200	200	200	200
PART	Pearson Correlation	.242**	.161*	.371**	-.084	1	-.057	-.176*	.192**
	Sig. (2-tailed)	.001	.023	.000	.237		.421	.013	.007
	N	200	200	200	200	200	200	200	200
OPPxPART	Pearson Correlation	.196**	.159*	.197**	-.310**	-.057	1	.323**	-.049
	Sig. (2-tailed)	.005	.024	.005	.000	.421		.000	.494
	N	200	200	200	200	200	200	200	200
DISTANCE	Pearson Correlation	-.402**	-.067	.009	-.016	-.176*	.323**	1	-.180*
	Sig. (2-tailed)	.000	.347	.903	.817	.013	.000		.011
	N	200	200	200	200	200	200	200	200
DIVIDEND	Pearson Correlation	.383**	.013	.066	-.164*	.192**	-.049	-.180*	1
	Sig. (2-tailed)	.000	.860	.354	.020	.007	.494	.011	
	N	200	200	200	200	200	200	200	200

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

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix 6: Hierarchical Regression Outputs

Appendix 6.1: Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.693[a]	.480	.464	.82535	.480	29.712	6	193	.000
2	.716[b]	.513	.495	.80098	.033	12.925	1	192	.000

a. Predictors: (Constant), DIVIDEND, TRUST, INFO, DISTANCE, OPPOR, PART

b. Predictors: (Constant), DIVIDEND, TRUST, INFO, DISTANCE, OPPOR, PART, OPPORxPART

c. Dependent Variable: ESAT

Appendix 6.2: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	121,438	6	20,240	29,712	,000[b]
	Residual	131,472	193	,681		
	Total	252,910	199			
2	Regression	129,730	7	18,533	28,887	,000[c]
	Residual	123,180	192	,642		
	Total	252,910	199			

a. Dependent Variable: ESAT

b. Predictors: (Constant), DISTANCE, INFO, TRUST, DIVIDEND, OPP_C, PART_C

c. Predictors: (Constant), DISTANCE, INFO, TRUST, DIVIDEND, OPP_C, PART_C, OPPxPART

Appendix 6.3: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.840	.387		9.925	.000		
	TRUST	.140	.045	.165	3.082	.002	.942	1.062
	INFO	.181	.060	.173	3.012	.003	.818	1.223
	OPPOR	-.363	.059	-.336	-6.208	.000	.917	1.090
	PART	.013	.055	.014	.243	.808	.803	1.245
	DISTANCE	-.107	.016	-.351	-6.535	.000	.936	1.069
	DIVIDEND	.014	.003	.248	4.578	.000	.915	1.092
2	(Constant)	4.237	.391		10.826	.000		
	TRUST	.117	.044	.138	2.632	.009	.923	1.084
	INFO	.148	.059	.141	2.492	.014	.797	1.254
	OPPOR	-.304	.059	-.281	-5.129	.000	.845	1.184
	PART	.033	.053	.035	.612	.541	.795	1.258
	DISTANCE	-.126	.017	-.414	-7.529	.000	.841	1.189
	DIVIDEND	.015	.003	.255	4.836	.000	.914	1.094
	OPPORxPART	.167	.046	.208	3.595	.000	.761	1.314

a. Dependent Variable: ESAT

*