JIMMA UNIVERSITY BUSINESS AND ECONOMICS COLLEGE MSc PROGRAM IN ACCOUNTING AND FINANCE



Challenges of Commodity Exchange in Ethiopia: The Case of Ethiopian Commodity Exchange (ECX) with Reference of Coffee Market

A Research Paper Submitted to School of Graduate Studies as a Partial Fulfillment of the Requirements for Masters of Science (MSc) Degree in Accounting and Finance

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Acronyms

ACE: African Commodity Exchange

AMC: Agricultural Marketing Corporation

ASCE: Abuja Securities and Commodity Exchange

CAADP: Comprehensive Africa Agricultural Development

DAP: Di-Ammonium Phosphate

ECA: Economic Commission for Africa

ECX: Ethiopia Commodity Exchange

EGTE: Ethiopian Grain Trade Enterprise

EOPEC: Ethiopian Oil Seeds and Pulses Export Corporation

GDP: Gross Domestic Product

ICT: Information and Communication Technology

KACE: Kenyan Agricultural Commodity Exchange

KM: Kilo Meter

MoFED: Ministry of Finance and Economic Development

SPSS: Statistical Package for Social Scientists

SSA: Sub-Saharan Africa

T+1: Transaction Period plus One Day

UCE: Ugandan Commodity Exchange

ULK 8: Unwashed Lekempeti grade 8

UNCTAD: United Nations Conference on Trade and Development

WDI: World Development Indicator

WRS: Warehouse Receipt System

WSDB 3: Washed Coffee from the Sidama B grade 3

ZAMACE: Zambia Marketing Agriculture Commodity Exchange

Abstract

To plan a suitable organizational growth as well as for great contribution for the economy, ECX need to identify the basic problems. Hence, the purpose of this study is to examine the basic challenges of ECX on coffee: with the reference of yirgachiffe, sidama, harari and jimma coffee. Both quantitative and qualitative methods, using responses given by 168 trade members in ECX from different occupation (student, farmer, fulltime merchant and government employees), is employed in the analysis. To collect the necessary data the researcher used questionnaires and telephone interviews and also probability sampling technique especially, systematic random sampling was used.

A descriptive method of data analysis was employed using Statistical Package for Social Scientists (SPSS) Version 16. The findings result from this study reveal that shortfall of agricultural product, physical infrastructure, macroeconomic instability, price fluctuation, lack of adequate warehouses that accommodate ECX participants request,. Higher penalty cost imposed on the participants for not withdrawing their commodity from the warehouses, poor quality of warehouse service insufficient time to store and transfer the commodity, inefficient and inadequate in store credit; discouraging the membership requirement of ECX, expensive membership seat fee and exposed for corruption were found to be amongst the fore front challenges to the success of ECX.

CHAPTER ONE

1. Introduction

"All is flux, nothing stays still. Nothing endures but changes" - Heraclitus 530-480 B.C.

1.1 Background of the Study

Agriculture is the backbone of Africa's economy in different ways; that is to say, in the provision of food for the increasing population; supply of adequate raw materials to a growing industrial sector; a major source of employment; generation of foreign exchange earnings; and, provision of a market for the products of the industrial sector among others;(Nchuchuwe, et al., 2012). It represents a lion's share in the world trade. On the list of 20 top agricultural and food commodity importers in 2004, 60 % are from SSA. African countries represent also 50% of top 20 countries, in terms of the share of total agriculture/ total exported merchandise in the world. However, 70% of Africans and roughly 80% of the continent's poor live in rural areas and depends mainly on agriculture for their livelihood. The sector accounts for about 20% of Africa's GDP (ECA, 2004), 60% of its labor force and 20% of the total merchandise exports (CAADP, 2003). Agriculture is the main source of income for 90% of rural population in Africa (ECA, 2007).

Uganda, Malawi and Ethiopia, the agricultural industry represents their principal activity, their means of sustenance and their source of income. The land maintains millions of farming families in each of these countries but most of them are extremely poor, too poor, for instance, to pay for proper agricultural extension services or to obtain useful market information. Due to un predictable weather conditions, they can afford only basic hand tools to carry out their work and, their dependency on their crop production is precarious. Food shortages are a common occurrence. These countries, nevertheless, are heavily dependent on agricultural goods for export revenue (Peter, 2011).

Most of the basic reasons to be farmer benefactor are followed traditional agricultural system (ECX, 2009). It is characterized by insufficient market information, poor quality, unstable price, lack of trust among trading partners, and uncoordinated markets. The lack of market information

creates fluctuating prices and huge price overhead on the consumers. Farmers are receiving merely a little bit of the profit due to weak access to storage space, telecommunication and transportation infrastructures and existence of multiple middle men at every stage of the market chain (Gabre-Madhin and Goggin, 2005).

The proposal that the agricultural marketing system should be reformed in these African countries by establishing commodity exchanges dates from before the beginning of this century but the realization of the idea has been taking place only over the last few years. It could be argued, therefore, that not enough time has elapsed to be able to judge whether the reforms have or have not succeeded in solving the problems they were designed to address (Peter, 2011).

Currently, African countries get an opportunity to know for the contributions of commodity exchange for the country development and give a greater attention and few of them are already established and the rest of them are going away to establishing the commodity market. But at the time of establishing and after establishing the commodity markets, there are certain variety challenges sometimes the nature of product matters and also some times the nature of working environment matters. When we see the experience of Kenya; as the findings of Mukhebi (1998) Kenyan Agricultural Commodity Exchange faces several constraints that impede the KACE from the successful accomplishment some of them are: poor quality of product that farmers deliver combined with the fact that most small-scale farmers find it difficult to deliver in bulk which is ideal for an exchange; and secondly, most of the commodities in Kenya are heavily regulated by boards and are grown and marketed in an environment of struggling cooperatives, which are inefficient, mismanaged and have cumbersome internal bureaucracies. And the other major factor identified in the study was intervention of Kenyan government, in grain markets that distorts prices and discourages increased private sector participation in commodity markets.

Modern ways of commodity exchanges play a major role in the development of an efficient agricultural marketing system. They are increasingly being promoted across Africa by governments and donors to improve the management of risks, reduce marketing costs, and offer transparent price discovery in food markets. Commodity exchanges are often viewed as a means

for ameliorating many of the ills currently pestilence African agricultural markets (Nicholas, et al., 2011).

After a years of establishment few researches has been conducted under the topics on challenges ECX. The previous researchers are tried to identify the challenges of ECX in a general way but not fully articulated. Challenges are differ from place to place, product to product. Therefore, to accesses problems of ECX, they considered only Addis Ababa to collect a necessary data are not sufficient. Rather until investigating the challenges of ECX on coffee they have to take in to account branch/ warehouse delivery center that are existing across the country. In addition to this as far as my knowledge there is no research appear on the topic of challenges ECX on Coffee items. Coffee is one of agricultural exporting product for ECX. It holds a large share among the agricultural exported products. However coffee faces different problems. Therefore, to increase the contributions of ECX for the economy, it should be avoid a problem which is related to the exported product. This are the basic driving forces that motivate the student researcher to conduct a research by including other warehouse delivery center/branches and look into detail other challenges of ECX which are not observed by previous researchers.

The main purpose of this study is to identify the basic challenges of Ethiopian commodity exchange on coffee with the reference to Yirgacheffe, Sidama, Hareri and Jimma. Finally, the student researcher strongly believes that apart from identifying the major challenges of the ECX, the study will has been forward feasible recommendations that help the concerned bodies to adequately tackle the problems.

1.2 Background of the Organization

Ethiopian Commodity Exchange was established in 2008 and new initiative for Ethiopia and the first of its kind in Africa with its end-to-end integrated system of central trading, warehousing, product grade certification, clearing, settlement, delivery, and market information dissemination (MoFED, 2009).

Ethiopian Commodity Exchange (ECX) is a public-private partnership initiative firm; establishment was founded on Proclamation No. 550/2007. This declaration mandate ECX to develop its own rules for the governance of its different operations. ECX is only one of its kind partnerships of market actors, the members of the Exchange, and main promoter is the government of Ethiopia. Ethiopian Commodity Exchange authority has organized by government through declaration in order to abolish market related evils and to make easy transparent, efficient, and innovative marketing system to keep the interests of both producers and consumers (Commodity Exchange, 2013).

The vision of ECX is to transform Ethiopia's old bound agriculture through creating a new market place like that serves all market actors, from farmers to traders to processors to exporters to consumer and properly implemented and regulated, commodity exchanges can contribute greatly to the achievement of the country's economic and developmental goals and strengthen the good deal power of weedy groups such as small farmers (Commodity Exchange, 2013).

ECX has the following three goals:

- ✓ To serve as a market for sellers and buyers, exporters and importers of agricultural commodities in Ethiopian, regional and world markets.
- ✓ To provide reliable commodity market information on supply, demand, prices and their trends in domestic, regional and world markets.
- ✓ To establish fair commodity market prices for both sellers and buyers through a system of competitive and transparent trading on the floor of the Exchange, i.e., price discovery

Since its establishment, ECX has set up a trading floor at the Mexico sub-city Show Grounds in Addis Ababa, where trading of commodities is conducted. The floor is open for trading limited types of agricultural commodities: crops such as Coffee, Sesame, Haricot Bean, Maize and Wheat (Commodity Exchange, 2003). ECX trading system is a ring-based trading system. Trading systems in which members' trade are openly and verbally on trading floor by 'crying' out of their price a designated area. In this system, all the trade participants should be present at on the trading ground and hence the best bargain price is discovered. Shouting is essential to draw attention towards the system being quoted by the trader, so that everybody interested in the system assemble the same place (Girma, 2011).

1.3 Justification of the Study

The Ethiopian Commodity Exchange plays a vital role for the development of the country's economy. The basic activities of ECX are creating new market place, providing information, integrating the market in general facilitating the transaction and finally exporting of agricultural products like Coffee, Sesame, Haricot Beans, Maize and Wheat. Coffee takes a lion share among those agricultural exporting products, and a major source of earning hard currency. Even if, ECX plays a major contribution for the country's economy, it still faces certain challenges. The previous researchers have tried to identify the challenges of ECX in a general way but not fully articulated. Challenges are differ from place to place, product to product. Therefore, to assess the problems of ECX, they are not sufficient as they considered only Addis Ababa to collect the necessary data. While investigating the challenges of ECX they have to take in to account branch/ warehouse delivery centers that are existing across the country. Additionally, as far as the researcher's knowledge is concerned, so far, no research appears to have been made that investigate; the challenges of ECX on coffee crops and also which include other branches/warehouse centers apart from Addis Ababa. Therefore, to increase the contributions of ECX for the economy, it should tackle or resolve the problems which are related to the exported products and try to consider other branches when they assessing the challenges. Finally, the student researcher strongly believes that apart from identifying the major challenges of the ECX, the study tried to forward feasible recommendations that help the concerned bodies to adequately tackle the problems. That is all what triggers the researcher to conduct a research in this area.

1.4 Statement of the Problem

The needs of the countries and also their efficiency/effectiveness to make a difference in the market in which they work still create a great deal debates about commodity exchange in Africa. Even if the debates are going to proceed, a lot of initiative countries have been started, few of which have been more successful than others (Commodity exchange best African practice, 2009).

In fact, in most of African countries like Ethiopia, agriculture plays a central role in the economic and social life of the nation and a cornerstone of the economy. But the sector follows the backward system and much of the product is produced by small scale farmers. The majorities of the farmers produce foods for their family and sell the rest which is left from the house consumption in the nearby market places (Gabre-Madhin and Ian Goggin, 2005).

The main agricultural products in Ethiopia are Teff, Wheat, Barley, Enset and other used as stable food; there are also various crop productions in Ethiopia. Unlike most of agricultural products mainly produced for subsistence, there are commercial crops like Coffee, Chat, and Sesame, (Alemayehu et al., 2010). This commercial crop directly or indirectly employ large number of the work force and are also the major source of the country's foreign earning.

The development of the agricultural market in Ethiopia is the same as the agriculture; it is based on old traditional methods (ECX, 2009). It is characterized by insufficient market information, poor quality, unstable price, lack of trust among trading partners, and uncoordinated markets. The lack of market information creates fluctuating prices and huge price overhead on the consumers. Farmers are getting only a small portion of the profit due to weak access to storage, telecommunication and transportation infrastructures and existence of multiple middle men at every stage of the market chain (Gabre-Madhin and Ian Goggin, 2005).

As an agrarian economy, Ethiopia needed a change from the traditional means of trading to better support the needs of all those involved in the trading and production: ECX was established to solve the above problems and help to address some of the challenges facing farmers, buyers and other participants of commodity markets.

In doing so, Ethiopian commodity exchange has been showing remarkable developments that can benefit the stakeholders, but few of the researches in the sector Dessalew (2011) and Gebrekiros (2011) mentioned that, the operation of the institution is affected by various challenges. The existing studies so far reviewed did not express the challenges in adequate details due to the fact that their various challenges in agricultural products and scope were confined to only Addis Ababa area. But until investigating the challenges they have to take in to account warehouse delivery center that are existing across the country. In addition to this there is no research appears to have been made on challenges of ECX on Coffee items. Coffee is number one exporting products in ECX. It has a major source of earning a strong currency. However, it faces different problems. Those are the basic driving forces that motivate the student researcher to conduct a research by including other warehouse delivery center/branches such as Dilla, Hawassa, Diredawa and Jimma. Additionally researcher has tried to look into detail other challenges of ECX on coffee which are not observed by previous researchers. Finally, come up with a better picture of the challenges ECX on coffee. The study is expected to fill the gap in existing literature by coming up with challenges faced by ECX participants at the above mentioned areas. Moreover, as the selected branches out of Addis Ababa are a predominantly major coffee producing area, the study come up with specific challenges of participants in coffee trading.

Taking the above problem background and rationale of the study, the study is intended to answer the following basic research questions:-

- 1) What are the major activities that are being accomplished by the ECX?
- 2) Are there the internal challenges such as: (Short fall of the product, Market Information, Quality Grading, and Warehousing) and external challenges (Physical infrastructure, Macroeconomic and price volatility, Financial accessibility, Trading practice, Regulatory) of ECX on coffee crop?
- 3) Does the existence of ECX really enable to reduce problem associated with the old and traditional agricultural exchange market?

1.5 Objective of the study

1.5.1 General Objective

✓ The overall objective of the study is to examine the challenges of Ethiopian Commodity Exchange on coffee.

1.5.2 Specific Objectives

This study on the challenges of Commodity Exchange in Ethiopia assumes the following specific objectives.

- ✓ To assess the major tasks being accomplished by Ethiopian Commodity Exchange.
- ✓ To know whether the internal challenges such as: (Short fall of agricultural product, quality grading, warehousing) and external challenges (physical infrastructure, Macroeconomic and price Volatility, Financial accessibility, Trading practice, Regulatory) are being faced by Ethiopian Commodity exchange on coffee crops or not.
- ✓ To know that weather ECX are able to reduce the problems that are prevalent in the traditional agricultural exchange market or not.

1.6 Significance of the Study

Under this thesis the researcher clearly investigate the basic challenges of Ethiopian commodity exchange on coffee crop and finally gives feasible recommendations to the stake- holders/ beneficiaries. Those beneficiaries are ECX, Policy Makers for and Planners can also draw lessons on the issue under consideration for better success in the field. Besides adding a brick to the body of knowledge on the subject, the output of the study could also be informative for development practitioners and donors interested to operate and strengthen Ethiopian commodity exchange. Furthermore, the study will contribute to the literature of the country on the subject and use as a boulevard and interested researchers to carry out more extensive studies for further research work.

1.7 Scope of the Study

The researcher considered only the basic internal and external challenges of ECX on coffee crops that are associated to market information, agricultural shortfall, quality grading, warehousing, trading practice and physical infrastructure, macroeconomic instability, price volatility, Government regulation, financial accessibility respectively. In addition, the researcher considered only four warehouse delivery center apart from Addis Ababa. It includes Dilla, Hawassa, Diredawa and Jimma centers. It stores Yirgachiffe, Sidama, Hareri and Jimma coffee correspondingly.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1 Theoretical Literature

2.1 .1 what is Commodity Market?

For most, a commodity exchange connotes a highly sophisticated market system, with an electronic-based, highly evolved system of trading in future commodity positions, example by markets such as the Chicago Board of Trade, the Tokyo Grain Exchange, or the London Metal Exchange, among others. For most, a commodity exchange is an advanced market mechanism for use in industrialized countries, out of the reach or inappropriate to low-income countries. However, at its heart, a commodity exchange is simply a central place where sellers and buyers meet to transact in an organized way, with certain clearly specified and transparent "rules of the game." In its broader sense, a commodity exchange is any organized market place where trade, with or without the physical presentation of commodities, is funneled through a single mechanism, allowing for maximum effective competition among buyers and sellers. The fact of having a single market mechanism to bring together the myriad buyers and sellers at any point in time effectively results in the greatest concentration of trading for a given good. This market mechanism, such as a price bidding system or an auction system, results in what is known as "price discovery," that is, the emergence of the true market-clearing price for a good at a particular point in time due to the highest possible attention and competition among buyers and among sellers. A commodity exchange is an institutional response, at a basic level, to the fundamental problem of achieving self-coordinating market order in the trade of agricultural products, which by their nature, are risky. One of the world's largest and oldest commodity exchanges, the Chicago Board of Trade, was established in 1848 by 82 grain traders in what was then a small Midwestern town, in conditions not too different from that of Ethiopian agriculture today, in response to a abundant harvest when farmers who went to Chicago and could not find buyers had to dump their unsold cereal in Lake Michigan. This strikes a hauntingly familiar

chord for those who recall that Ethiopian farmers left grain to rot in the fields in 2002 as prices collapsed (Gabre-Madhin and Ian Goggin, 2000).

2.1.2 Purpose of Commodity Market

The purposes served by a commodities exchange depend in part on the nature of the specific contracts that are traded. By simply centralizing trade in a certain commodity, an exchange can facilitate title transfer, market transparency, and price discovery and then minimize the transaction cost through coordinating centralized exchange can minimize the costs associated with identifying market channel, physically examine product quality, and finding buyers or sellers. By minimizing transactions costs and enhancing the flow of information, an exchange can improve returns to market agents while reducing short-term price variability and spatial price dispersion. Such contracts offer little capacity to address inter-annual price uncertainty, but more sophisticated contracts allowing exchange in futures can enable further risk management. Such futures contracts, however, require a highly developed institution and cannot maintain spot within desired bounds. It is possible to organize an exchange around an auction floor in which physical goods are traded. In Africa, many such auction floors dealing in export commodities have operated for many decades. These auctions floors lower search costs for participants and may reduce market thinness and consequent price volatility, but they also impose costs for transportation and warehousing and offer little or no services for price risk management or financing. Recent efforts by developing commodity exchanges have attempted to move beyond auction floors to trade in fungible contracts that can be used as price-hedging devices (Shahidur et al., 2010).

2.1.3 Basic Ingredients for Success of Exchange

According to Gabre-medhin (2006) there are six core elements required for a successful commodity exchange:

1. A trading platform: An exchange needs a system to match multiple offers to sell and bids to buy, whether this is a system where buyers and sellers are physically present or an electronic system where trading is done remotely. The trading platform must be efficient,

robust, not too expensive, and fit with clients' needs. With advances in information technology, traditional open outcry trading is giving way to electronic trading. But, with or without technology, every exchange needs a trading system that efficiently matches offers and bids.

- **2. Brokers:** Brokers, who are formally licensed and insured, act as marketing agents, play a core role by facilitating a wide population of buyer and seller clients to participate in the exchange. The integrity of the brokers on the exchange is core to the integrity of the exchange itself. With an exchange, the business of brokers is redefined from information provision to enabling the process of matching buyers and sellers.
- 3. Contracts: The seller before transfer of the title and buyer before made the payment the parties need agreement. So the exchange needs to offer contracts that are commodity and grade specific, with standard specifications for grade, lot size, delivery, payment, measurement, and dispute resolution, among others. By offering standardized contracts, the exchange makes it easier, cheaper, and less risky for unknown partners to trade with each other. But the contracts need to be ones that the target clients need or are looking for and they need to be well designed to reflect actual trading practices. For example, a maize contract with a lot size of 1000 tons would be difficult to implement under current conditions in Ethiopia, while a lot size of 5 tons (the equivalent of an Isuzu truck) will draw in a lot of players.
- **4. Counterparty risk management:** One of the key reasons for a contract is to greatly reduce the likelihood of contract default or non-performance. The exchange manages counterparty risk in a variety of ways: through imposing discipline on its users with strict rules of trade, through requiring margin deposits of funds in advance of bidding, through requiring that products be weighed and graded and deposited in an insured warehouse in advance of an offer, and through operating a clearing and settlement mechanism, where the Exchange itself or an affiliated body ensures that payments are made against delivery and vice versa. To ensure this, the Exchange must work closely with banks as well as warehouse operators.

- 5. Product integrity: Commodity exchange involves the transfer of ownership of a physical agricultural product that must be graded, weighed, stored, handled, and ultimately delivered from one location to another but the case are not exists on commodity exchange market. This greatly increases the complexity of a commodity exchange. The Exchange's viability depends on whether it trades products of integrity, with grades that are well understood and unadulterated, and guarantees that the sample truly represents the entire lot, that what is in the warehouse is actually there in the quality, quantity, and condition in which it was deposited, and that it will be delivered in that condition at the completion of the trading transaction. For this to happen, the Exchange must work very closely with warehouse operators, insurers, and transporters.
- 6. Viable regulation and enforcement: Ultimately, the whole exchange system relies on trust trust in the exchange (and its clearing house), trust in the brokers to whom clients entrust their money, and trust in the warehouses and collateral managers who will issue the pieces of paper that will actually be delivered on the exchange. A good system of regulation is necessary to ensure such trust. Although the exchange is a self-regulatory organization, there needs to be an over-arching regulatory and legal infrastructure in place to ensure regulation at different levels: self-regulation by the brokers, warehouses and the exchange, regulation by trade associations who license and monitor their members, and regulation by a state regulator, such as an Exchange Commission.

2.1.4 How Does an Exchange Works?

Most exchanges, even when they have a virtual or electronic trading system, operate in a physical place, with an exchange "floor" on which trading occurs. The exchange floor is typically organized by commodity. A common misperception is that a commodity exchange determines or establishes the prices of traded commodities. This is incorrect. Prices are determined solely by supply and demand conditions. If there are more buyers than sellers, prices will be forced up. If there are more sellers than buyers, prices will be forced down. Thus, buy and sell orders, which are channeled to the exchange floor for execution, are what actually

determine prices. The orders to buy or sell are done by public outcry, rather than by private negotiation, and the prices at which transactions are made are recorded and released publicly by the exchange as soon as possible, generating market transparency. In comparison to an auction where the emphasis is on selling, trading on a commodity exchange is like a continuous two-way auction, in which offers to buy are going on simultaneously with offers to sell. This is possible because the graded products needs no description with a standardized contract and because there is sufficient volume of both buy and sell orders (Gabre-Madhinand Ian Goggin, 2005).

Clearly, the key to a successful exchange is to bring about the needed highest possible concentration of buyers and sellers into a single market mechanism in an efficient, low-cost, manner. To do so, require that the market operate with certain basic rules and with certain types of actors. These characteristics or operating modalities are precisely what distinguish what is known as a commodity exchange from a typical central wholesale or terminal market (Ethiopian Development Research Institute cited in, Desalew, 2011).

2.1.4.1 Clearing and Settlement of Services

Clearing is the process of determination of obligations, after which the obligations are discharged by settlement. Settlement is a two-way process that involves legal transfer of the title to funds and securities/other assets on the settlement date. The clearing bank services are a highly time critical activity as delays directly impact the members/exchange. Financial institution especially, Banks can play an important role in settlement of obligations in the overall ecosystem including exchanges, members, clients, custodians, etc. This is highly transactional nature of the business. Dedicated infrastructure, trained manpower, and use of technology are the key parameters to doing this business (Sahadevan, 2002).

The banking settlement system plays a crucial role in the overall risk management of the exchange mechanism, wherein daily settlement of trades/obligations, ability to manage fund flows in volatile days, coordination with exchanges and members, etc contribute towards effective functioning of the exchange mechanism. Apart from clearing services, banks also provide fund and non-fund based facilities to the members of the exchange for managing their working capital requirements and, thus, earn revenues through float funds, interest earned on overdrafts/loans, commission income, etc. (Gibremedihn, 2011).

A clearing and settlement system that assures payment to sellers as well as minimizes overexposure of counterparties is essential. Financial institutions which are members of the exchange usually offer clearing services. Reliable and timely dissemination of such market information as would ensure informed decisions by various parties, local and regional, who intend to trade. Informed decisions are critical to market efficiency (Sahadevan, 2002).

All members of an exchange are required to clear their trades through the clearing house at the end of each trading session, and to deposit with the clearing house a sum of money (based on clearinghouse margin requirements) sufficient to cover the members debit balance (Lerner, 2000).

2.1.4.2. Rule /Contract enforcements of service

The rules of the contract have four key dimensions of the market: the product, its price determination, the actors, and the contractual relations that bind them. These rules and modalities together create much needed integrity and trust in the system. To begin, goods traded on an exchange must be standardized according to known standards of quality and quantity. The certification must be considered by all to be fair and neutral. Second, an exchange operates a given system of price bidding that is aimed at publicly displaying buy and sell offers in a transparent and low-cost manner. The main thing is that the price bidding is done openly rather than privately. Third, in order to ensure that the rules are followed; exchanges operate with membership-based trading, where membership is based on the ability to comply with the rules of the exchange and to meet certain standards. Fourth, the exchange's regulations and directives usually make it mandatory for members to make use of standard contracts prepared by the exchange to which they belong. Thus, members are required to strictly adhere to the terms and conditions laid down in the contracts (Gabre-Madhinand and Ian Goggin, 2005).

According to Gideon (2003) Commodity exchanges typically institute and robustly enforce relevant procedures, rules, regulations and guidelines to regulate the conduct of members, brokers and transactors. They are often able to take disciplinary action against parties in the event of non-compliance with the rules and procedures. They also tend to establish formal systems for quick and low cost resolution of trade disputes

2.1.4.3. Market Information System

A core attribute of an exchange, implied within the four dimensions noted above, is that it enhances market transparency through generating and disseminating information. Through its own functioning, the exchange creates market information about the underlying supply and demand conditions in the economy. Thus, contrary to popular perception, a commodity exchange does not require an external market information system as a pre-requisite to its proper functioning. An exchange becomes the market information system it undertakes function of price discovery based on the public posting of buy and sell orders (Gabre-Madhinand Ian Goggin, 2005).

When the volumes of trade on the exchange are sufficiently large to justify that price discovery according to true market fundamentals is occurring, then the dissemination of that information of market prices provides a great service to the market, and the wider economy. This fact alone is a compelling reason to justify an exchange (ibid).

2.1.4.4. Price Determination

Prices of commodity exchange are determined solely by the interaction of supply and demand conditions. If there are more buyers than sellers, prices will be forced up. If there are more sellers than buyers, prices will be forced down. Buy and sell orders, which originate from all sources and are channeled to the exchange trading floor for execution, are actually what determine prices. These orders to buy and sell are translated into actual purchases and sales on the exchange trading floor, and according to regulation this must be done by public outcry across the trading ring or pit and not by private negotiation. The prices at which transactions are made are recorded and immediately released for distribution over a vast telecommunications network (Lerner, 2000).

2.1.4.5. Warehouse and Quality Grading System

Warehouse can be defined as a place in which goods or merchandise are stored; a storehouse. And the development of warehousing has positive knock-on effects up and down the supply chain. The warehouse receipt system (WRS) provides a platform for the introduction of other

institutional innovations, notably grading, contracting and exchange trading. It facilitates public procurement as national and international agencies can simplify their activities by dealing in paper such as warehouse receipts, rather than trade directly in physical commodities (Gibremedihn, 2011).

WRS is also a valuable instrument for financing agricultural commodity chains, especially in countries where the shortage of alternative forms of collateral constitutes one of the most important obstacles in access to finance. Warehouse receipts are issued by warehouse operators as evidence that specified commodities of stated quantity and quality have been deposited at particular locations by named depositors. The warehouse operator holds the stored commodity by way of safe custody; implying he is legally liable to make good any value lost through theft or damage by fire and other catastrophes but has no legal or beneficial interest in it. The quality of warehouse and storage management skills tends to be highly variable in most developing countries. Improving professional skills in the warehousing industry is necessary if storage losses are to be kept at a minimum. Similar training and capacity building is required to enable traders and processing companies to utilize the WRS in cost-effectively managing their inventories (ibid).

According to (Gebre-medhin and Ian Goggin, 2005) transferable warehouse system is highly complementary to the functions of the exchange. The receipts system goes hand in hand with a commodity exchange in that: Grades and standards are essential to warehouse operations as well as to a commodity exchange with standardized contracts; Price transparency is achieved because receipts indicate a specific grade, which generates price information that can also be used on the exchange; Risk is transferred by selling receipts on the exchange; and, Integrity and order: the legal enforcement of quality and of the transferability of the receipt is vital for both the warehouse receipts system and the functioning of the exchange. Grading can do through a laboratory based at the exchange on a sample basis or by other parties, such as the state or private actors. What is critical is that the product grades are widely accepted by the market and are developed with the participation of all market actors, including farmers, traders, processors, and consumers.

2.1.4.6 Membership

In a deregulated market, membership is voluntary. Any individual or business organization that is engaged in the marketing of commodities may become a member of an exchange: traders, brokers, cooperatives, processors, state enterprises, etc. A key function of the exchange is therefore to ensure compliance of all of its members. An exchange is itself registered with and supervised by government agencies established to oversee its activities in line with the law in place (UNCTAD, 2005).

The exchanges regulations and directives usually make it mandatory for members to make use of standard contracts prepared by the exchange to which they belong. Thus, members are required to strictly adhere to the terms and conditions laid down in the contracts, to keep appropriate records of their transactions; and to submit to be bound by the disciplinary rules of the exchange (Gibremedihn, 2011).

2.1.5 Contracts of Commodity Exchange

Commodity exchange is an exchange where various commodities and derivatives products are traded. Most commodity markets across the world trade in agricultural products and other raw materials (such as wheat, barley, sugar, maize, cotton, cocoa, coffee, milk products, pork bellies, oil, metals) and contracts based on them. These contracts can include spots, forwards, futures and options on futures. Commodity exchanges usually trade futures contracts on commodities, such as trading contracts to receive something and it protects the farmer (seller) from price drops and the buyer from price rises. Speculators also buy and sell the futures contracts to make a profit and provide liquidity to the system (Meijerink, et al., 2010).

A. Spot Contract

A spot contract is an agreement between a buyer and a seller at time zero, when the seller of the asset agrees to deliver it immediately for cash and the buyer agrees to pay in cash for that asset. Thus, the unique feature of a spot contract is the immediate and simultaneous exchange of cash for securities, or what is often called delivery versus payment (Ross, et al., 2002).

B. Forward Contract

A forward contract is a legally binding agreement between two parties calling for the sale of an asset or product in the future at a price agreed upon today. The terms of the contract call for one party to deliver the goods to the other on a certain date in the future, called the settlement date. The other party pays the previously agreed-upon forward price and takes the goods. Forward contracts can be bought and sold (ibid).

The buyer of a forward contract has the obligation to take delivery and pay for the goods; the seller has the obligation to make delivery and accept payment. The buyer of a forward contract benefits if prices increase because the buyer will have locked in a lower price. Similarly, the seller wins if prices fall because a higher selling price has been locked in. Note that one party to a forward contract can win only at the expense of the other, so a forward contract is a zero-sum game (ibid).

C. Future Trading Contract

According to Sahadevan (2002) Futures contracts are an improved variant of forward contracts. They are agreements to purchase or sell a given quantity of a commodity at a predetermined price, with settlement expected to take place at a future date. The futures contracts as against forwards are standardized in terms of quality and quantity, and place and date of delivery of the commodity.

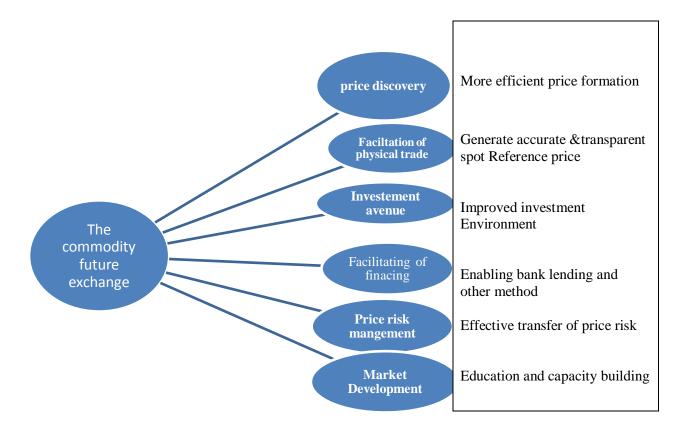
Parvez (2009) cited in the literature futures market contract in commodity exchange are largely used as risk management or hedging mechanism on either physical commodity itself or open positions in commodity stock. This purchase or sale of commodities must be made through a broker or trading member who must be a member of the exchange and the trade should be done under the terms and conditions of the exchanges.

Due to the bulky nature of the underlying assets, physical settlement in commodity derivatives creates the need for warehousing, the quality of the asset underlying a contract can vary largely and this becomes an important issue to be managed. Participants of a commodities exchange are not free from risk.

In futures contracts, inexperienced investors may face price risk as all futures prices respond to many factors. Such factors may include unexpected high inflation, general strikes, natural calamities, reports on economic forecasts, politics and even on rumors and many other internal and external matters. The factors that can influence commodities prices may occur any time.

In addition to the above, Fabozzi and Modigliani (1996) stated that the basic economic function of future markets is to provide an opportunity for market participants to hedge against the risk of adverse price movements. Future contracts products created by exchange .To create a particular future contract; an exchange must obtain approval from the commodity future trading commission, government regulatory agency.

Function Promising Benefit Arising Figure -2.1 Exchange Functions and Benefits



Source: UNCTAD, 2009

2.1.6 Who is the beneficiary?

A. Rural Farmer and Cooperative Unions

Agriculture is the major activity and a source of income for Ethiopia economic in, which provides about 46% of the GDP, 80-90% of the export revenues and employment for over 80% of the population (Ephraim, et al., 2003). So, that the existence of modern commodity exchange market are create a great opportunity for the farmer as well as cooperative unions who are formed ten to twenty farmers to increase their income (Jakob, 2009).

B. Traders

Most of the goods that are traded through ECX take the route from producer to exporter via one or many traders. Such traders can be either supplier companies that buy up production from farmers in their region of the country, or individual brokers who act as representatives for cooperative unions, supplier companies or exporters on the ECX trading floor. All traders require real-time access to the latest prices, as well as a deeper understanding of current market trends. Supplier companies and cooperative unions that sell their goods through the exchange require a secure and efficient warehousing system, access to information about grades and standards and reliable payments once a trade has taken place. Trader, suppliers and cooperative union, accessing the whole information ECX, play unreserved role (ibid).

D. Exporters

Ethiopia's export trade, in particular coffee, is strongly consolidated into a handful of major export companies. The exporters connect the local market to the international market, handle shipping and make sure the goods meet the requirements of the foreign buyer. Exporters need a market with good international reputation, high international penetration and high liquidity, in addition to access to the latest prices and trends. Exporters also benefit from the quality and quantity guarantees that ECX provides for all trades that go through the exchange (ibid).

E. Policy Makers

Political decision makers in Ethiopia require an understanding of historical, current and future market economics to best be able to promote action that benefits the long term development of the country. ECX can aid in this process by providing a transparent, efficient and stable market with high international reputation (ibid).

2.1.7 Experience of African Commodity Market

While many of the commodity exchanges introduced in Asia and Latin America in the 1990s seem to have taken root, the record in Africa is less encouraging. Five African countries launched agricultural commodity exchanges following market liberalization in the 1990s, but only South Africa succeeded in making its exchange sustainable. Despite initial signs of success, Zambia and Zimbabwe suspended their operations following unusual price hikes and subsequent government intervention. Although they continue to exist with donor and government support, the Kenyan Agricultural Commodity Exchange (KACE) and the Uganda Commodity Exchange (UCE), both launched in the late 1990s, have never been able to attract sizable trade volumes. Currently, their limited roles include providing price information in Kenya and regulating some warehouses on behalf of the government in Uganda (Shahidur, et al., 2010).

Since 2004, more and more countries have launched exchanges. Notable examples include the African Commodity Exchange (ACE) in Malawi established in 2004, Nigeria's exchange established in 2006, a new Zambian exchange (ZAMACE) established in 2007, and the much-publicized Ethiopian Commodity Exchange (ECX) established in 2008. The role of ACE has so far been limited to providing price information and facilitating procurement for the World Food Program, while the Abuja Securities and Commodity Exchange (ASCE) began trading in maize and soybeans in 2006 on a very limited scale. The Ethiopia Commodity Exchange (ECX) is the most recent Spot/Cash exchange in Africa, which was launched in 2008. It is owned by the Government of Ethiopia, which funded the initial capitalization of about US\$20 million, with some contribution by external partners (UNCTAD report, 2008). Coffee is the main commodity traded by ECX. However Maize, Wheat, Sesame and Beans are also listed for trading. ECX, a government-owned initially focused on trading Maize, Wheat, and Beans, but it was unable to attract a significant volume of this commodities. Since December 2008, the ECX has turned its

focus to export commodities, with the support of policies discouraging export through other arrangements (ibid).

2.1.8 Overview of commodity exchanges in Ethiopia

2.1.8.1 The Post-Reform Market Challenges

Other many countries like in sub-Saharan Africa, Ethiopian grain economy underwent a dramatic market reform in the early 1990s with the nearly complete liberalization of the grain market. Prior to these reforms, for sixteen years until 1990, the Dergue government closely controlled trade, through cooperatives and its parastatal agency, Agricultural Marketing Corporation (AMC), initially set up in 1976 with World Bank support for the function of purchasing grain and distributing it to consumers (Lirenso,1993). In this period, policies included fixed panterritorial grain prices, restricted private inter-regional grain movements, limited private sector participation, and a producer grain quota (Lirenso, 1987). Farmer quotas to the AMC amounted to 10 to 50% of the harvest at fixed AMC prices that were consistently below market prices, which had the effect of depressing rural incomes and production (Dercon, 1995).

In March 1990, a dramatic market reform lifted, suddenly, all restrictions on private trade and eliminated official prices and quotas. Next, in 1992, the Transitional Government proceed reforms from side to side removing wheat consumer subsidies and slim down the AMC, through closing all eight zonal offices, reducing its branch offices from 27 to 11 and its grain purchase centers from 2013 to 80. It was renamed the Ethiopian Grain Trade Enterprise (EGTE) with a new mandate of stabilizing prices and maintaining buffer stocks. Unlike most post-reform African states where marketing boards continued to dominate trade, the EGTE plays a relatively minor role, with only a 2 to 5% share of the domestic market (Jayne, et al., 1998). In 1999, further reforms involved merging EGTE with the Ethiopian Oil Seeds and Pulses Export Corporation (EOPEC) and re-establishing it as a public enterprise, no longer required to stabilize grain prices, with the major objective of operating for commercial profitability by focusing on exportable grains. Because market reforms resulted in the nearly total withdrawal of government intervention from the market, it was considered by a study in 1998 that the reforms enacted in Ethiopia constituted a particularly important test of the hypothesis by the international

community that the liberalization of markets would reduce costs and catalyze growth in production (Jayne, et al., 1998).

What then were the impacts of these market reforms? Numerous studies have documented the effects of these policies (Lirenso (1993); Dercon (1995); Negassa and Jayne (1997); Gabre-Madhin, (2001), Gabre-Madhin et al., 2003). As predicted, these analyses discovered that liberalization did indeed result in a significant re-engagement of the private sector in grain trade, improved market integration, and the reduction of marketing margins. However, very importantly, these studies also pointed out the reforms did not have the envisaged impact on agricultural growth and poverty reduction. Why? First, despite the narrowing of price spreads or margins, market reforms did not reduce the volatility of grain prices and may have indeed exacerbated it. Linked to this, significant constraints to market performance remained which led to the persistence of "thin" markets defined as markets in which there are few purchases and sales. Thus, because these market constraints limit the scale and Scope of market activity, they ultimately limit the potential of the market to catalyze Production, growth and boost rural incomes in the country.

The key constraints of market performance can be identified as either connected to poor infrastructure or to missing institutions. In terms of infrastructure, major anxieties are the poor access of smallholder farmers to roads, as well as limited telecommunications and storage infrastructure. These weaknesses contribute to the high cost of transport as well as of other physical marketing costs, such as storage, handling, etc. Thus, marketing costs amount to some 40% to 60% of the final price, of which some 70% is due to transport. However, beyond the infrastructural issues, studies constraining to trade. These costs, distinct from physical marketing costs, are costs related to coordinating market transactions between actors, such as the costs of finding for and screening a trading partner, the costs of obtaining information on prices, qualities and quantities of goods, the costs of negotiating a contract, the costs of monitoring contract performance, and the costs of enforcing contracts. Because these costs are difficult to identify and to measure, they are often overlooked, yet they offer powerful explanations of the persistence of missing markets or of market failures (Issac, 2011).

In fact, these transaction costs also influence the extent of the physical, more observable, marketing costs. For example, handling costs in Ethiopian grain markets are roughly 25 percent

of the margin, which is far above the norm in sophisticated markets. These costs are particularly high in Ethiopia because the lack of grade and standards and the problem of contract enforceability forces buyers of grain at every transfer of ownership in the chain to off-load the shipment and re-sack every bag of grain. Similarly, because there is little coordination in the transport sector and thus no information regarding whether transport rates.

In the Ethiopian context, the presence of prohibitively high transaction costs, evidenced by the lack of sufficient market coordination between buyers and sellers, the lack of market information, the lack of trust among market actors, the lack of contract enforcement, and the lack of grades and standards, implies that buyers and sellers operate within narrow market channels, that is, only those channels for which they can obtain information and in which they have a few trusted trading partners. An extensive empirical analysis of Ethiopian market behavior thus reveals that market actors conduct business across short distances, with few partners, in few markets, and with limited storage, implying that opportunities for expanding market activity, otherwise known as arbitrage across space (transporting significant distances to market goods) and across time (storing for significant periods), are limited (Eleni Z. et al., 2003). This limited arbitrage in turn reduces the responsiveness of the market to changes in supply and demand. The weakness of the market was most starkly highlighted in the food crisis of 2002-2003, when a significant surplus of grain in 2002 led to the collapse of market prices, significantly compromising rural incomes and leading to disincentives to further technology adoption by farmers.

The persistence of these market constraints in Ethiopia points to the fact that market reforms alone, defined as the removal of policy distortions, are necessary but not sufficient to enhance market performance. This suggests that the new development agenda, not only in Ethiopia but throughout post-reform Africa, is to move beyond market reform to market development. In addition to policy incentives, key interventions are required to develop appropriate market institutions and build needed infrastructure, (Gebre-medhin, 2005). In recognition of this, the Government of Ethiopia restructured the Ministry of Agriculture and Rural Development and established a state ministry on agricultural input and output markets in 2004. At present, both the government and its international partner's are engaged in dialogue on a concerted set of interventions to enhance the performance of agricultural markets.

2.1.9 Ethiopian Commodity Exchange Areas of Operation

Most exchanges around the world have focused on providing a single service; a well functioning trading platform through which sellers and buyers can meet, discover prices and trade. ECX however operates in an environment where few important related services, such as warehousing, electronic banking and market data dissemination, function satisfactory and therefore the organization has made a decision to provide market actors with a complete end-to-end solution (Geber-Madhin, 2005).

2.1.9.1 Warehousing and Grading

To sell agricultural products through ECX, a seller is required to deposit goods at an ECX warehouse. There the goods will be labeled by type and origin (in the case of coffee) and be given a quality grade according to a standardized set of measurements. For Coffee, grade1 is highest and grade10 is lowest. These combinations of labels (called a symbol) together identify the type of product that is being sold, e.g.WSDB3 for Washed coffee from the Sidama B region of grade 3 or ULK 8 for unwashed coffee from the Lekempti region of grade 8. Once the grading process is completed, the seller is given a warehouse receipt, which can later be sold to a buyer through the exchange (ECX, organization profile, 2013).

2.1.9.2 Trading Operations

Trading takes place on a physical trading floor located in Addis Ababa, where buyers and sellers participate in "Open outcry" bidding. Market prices are constantly changing throughout trading hours. The ECX uses several ways to transmit these prices in real time to producers and consumers directly. Once a deal is made, the ECX credits commodity to the buyer. The buyer then needs to collect its goods within 10 days from the warehouse where the product was deposited (Mheen-Sluijer et al., 2010).



Source: from ECX organization profile: Trading floor of ECX

2.1.9.3 Clearing and Settlement Option

To facilitate its automated trade reconciliation system described above, ECX collaborates with the major bank in Ethiopia to be able to issue transfers between the accounts of traders. A warehouse receipt is also automatically and electronically transferred to the buyer. While such systems are common place in many other parts of the world, it is the first such system that has been established in Ethiopia (Geber-Madhin, 2005).

2.1.9.4 Market Surveillance

The intended benefits of ECX over the previous coffee auction including increasing the confidence and transparency in the market, reducing the market risk and to ensure fair and legal trade .Therefore, ECX market surveillance attempts to keep track of market actors to discover different types of extraordinary behavior, which may initiate further investigation and possibly lead to expelling the trader from further access to the market (ibid).

2.1.9.5 Market Data Dissemination

High market transparency can be defined as that every market actor has access to the information they are interested in or require to make informed market decisions. The ECX market data department therefore handles the tasks for interpreting current market trends and disseminating

market information to the different groups of people along the chain of trade, from producer to middlemen to local or foreign buyers and analysts (ibid).

2.1.10 Why an Exchange for Ethiopia?

A country like Ethiopia, the primary source of income for the majority peoples are agricultural activity. So, the benefits of commodity exchange market for the country are unquestionable . Those are:

- i. An exchange provides a mechanism for increasing market liquidity
- ii. An exchange enables transfer of price risk,
- iii. An exchange reduces transaction costs by:
 - ❖ Facilitating contact between buyers and sellers
 - Enabling centralized grading of products
 - Transmitting information about prices and volumes
 - ***** Ensuring that contracts are enforceable
 - Providing mechanism for price discovery
 - Simplifying transactions with standard contracts

An exchange creates trust, order, and integrity in the market (Gabre-Madhin and Ian Goggin, 2005).

2.2 Empirical Literature Review

Rashid, et al., (2010) identify four primary constraints to the development of vibrant commodity exchanges in the developing countries: market size, weak infrastructure and underdeveloped financial services; and lack of supportive legal and regulatory frameworks. In addition to the above according to (Gabre-Madhin and Ian Goggin, 2005) before the establishment of the ECX found that the Ethiopian grain markets faced some constraints such as; lack of sufficient market coordination between buyers and sellers, lack of market information, lack of trust among market actors, lack of contract enforcement, and lack of grades and standards, implies that buyers and sellers operate within narrow market channels, that is, only those channels for which they can obtain information and in which they have a few trusted trading partners and their conclusion showed that establishing of a commodity exchange will eliminate constraints that the Ethiopian commodity market faced.

Tollens (2006) in his study cited that the absence of easily accessible market information for farmers or small traders leads to lack of market transparency, low bargaining power of the buyers and sellers, low and highly variable prices due to market inefficiency, coexistence of surplus and deficit areas due to weak spatial integration of markets, high risks, low produce quality and high losses, high transaction costs and insufficient production to satisfy consumer demand.

Another important finding made by Ian Goggin (2007) showed that no perceived need for market transparency in the market, lack of credit, lack of understanding of the exchange concept, new concept-particularly for small-scale operators, including farmers, resistance to change and non-performance on contracts are considered in the study as the main constraints for the successful accomplishment of commodity exchanges.

At the same time it faces certain challenges after establishment. When we see at the KACE, according to (Mukhebi, 2004) faces more than a few challenges among which the following two are the most important: (i) the poor quality of product that farmers deliver combined with the fact that most small-scale farmers find it difficult to deliver in bulk which is ideal for an exchange and (ii) most of the commodities in Kenya are heavily regulated by boards and are grown and marketed in an environment of struggling cooperatives, which are inefficient, mismanaged and have cumbersome internal bureaucracies.

While Shahidur, et al., (2010) found that countries with successful exchanges have far more developed communications and/or transportation infrastructure than countries with less successful exchanges and the researchers added that the real challenge in African commodity exchange is not the development of grades but the enforcement of contracts that use those goods.

A study by Adebusuyi (2004) finding supported the above and reveals that communications and transportation infrastructure is critical to a functioning exchange and outstanding constraints, and challenges to the stabilization of commodity prices were identified to include the small scale nature of production and low level of further processing, poor performance of state and public institutions, poor infrastructure which made production uncompetitive and inadequate market

information as well as poor access to productive assets. And as per his findings, one of the major factors influencing the fluctuation of commodity prices is cyclical income fluctuations in the consuming countries.

According to Shahidur et al., (2010) Communications and transportation infrastructure is critical to a functioning exchange. First, trade at a futures exchange requires a communications network that can provide traders with spot market information in order to estimate the basis. A commodity exchange also needs to be supported by a reliable system for transportation and distribution, so that delivery location can be credibly specified in the contract. Moreover, transaction costs must be stable enough for traders to evaluate the spread between the spot and futures contract prices. Infrastructure must not only support the exchange, but it must also link various spot markets if the exchange is to function successfully. Ideally, the physical and communications infrastructure will ensure information regarding product quality, quantity, form, and price in all relevant markets is available across various spot markets.

Bollman et al., (2003) as cited in Shahidur et al., (2010) provide a rare detailed case study of the collapse of a specific contract. Their analysis of the Di-ammonium phosphate (DAP) futures contract in the Chicago Board of Trade indicated that the contract ultimately failed because the cash and futures markets were not sufficiently well linked, making it a poor hedging tool that offered no additional risk management support. This case study demonstrates the difficulty of providing a functional, balanced contract even when the infrastructural, macroeconomic, and institutional environment is hospitable. In the absence of active cash markets and reliable information regarding those markets, it may be difficult to develop an attractive contract to trade on an African commodity exchange.

According to Shahiduret al., (2010), most African cereals markets, a system of grades and standards is not likely to evolve without government involvement. However, the real challenge in African markets will not be the development of grades but the enforcement of contracts that use those goods. The legal system must ensure contract enforcement and a regulatory system must ensure that warehouses do not issue multiple receipts for a single lot. For futures contracts,

participants must have confidence that contracts will be recognized by the legal system and that contract obligations will be enforced.

Celeste (2010) also found inadequate market information, a weak system to enforce contracts, lack of standards and grades and insufficiency of the necessary institutions that support proper market functioning are some of the constraints of coffee market in Ethiopia.

Desalew (2011) indicated that in most African cereals markets such a system of grades and standards is not likely to evolve without government involvement. However, the real challenge in African markets will not be the development of grades but the enforcement of contracts that use them.

Generally, many researchers identify the challenges of Commodity Exchange like weak infrastructure (Communication and Transportation), price volatility, lack of enforcements implementing of contract, poor quality of product, and lack of credit. But in this study the student researcher try to see the basic internal and external challenges which were included in the other studies and any other challenges which are associated with trading practice, Warehousing challenge, shortfall/losing their weights of products challenges etc. The unique features the study is that are; it can significantly identify the major challenges of ECX than the other studies conducted thus far because this study considered four warehouse delivery centers. But when we see the previous studies all of them focused in Addis Ababa.

CHAPTER THREE

3. Research Methodology

"There is your way, my way and the right way" — American proverb

The researcher has used qualitative and quantitative approaches /methods in order to produce the truthful report. To examine the internal and external challenges of Ethiopian Commodity Exchange on coffee item, the researcher employed a questionnaire which comprises (open ended and close ended questions) and also unstructured interview.

3.1 Source of Data and Method of Data Collection

The researcher has collected the data from primary source of data and secondary source of data. Primary data was gathered through employing questionnaire (open and close ended questions) which is adopted from Gberekrose Gebermedihn and key informant interviews (unstructured telephone interviews). To hold up the collected primary data, direct observation was also used. In addition to this, Secondary data such as, data from ECX published and unpublished documents, books and electronic sources share been used.

3.1.1 Data Collection Instruments

Appropriate questionnaires were prepared and used for the survey. Respondents were told what the research was all about in the language that they can understand. Respondents in this study were speakers of Amharic. Therefore, the questionnaire was translated into the language that they can understand. Doing so was very important for respondents to easily understand the questionnaire and express their ideas comfortably.

3.2 Sample Size and Sampling Procedure

From the total population of 329 trade participants, the researcher has taken 177 trade participants. The study employed standard statistical formula to determine the sample size of the study. Based on a formula, the sample size was 177 but the returns of the questionnaires from the given sample were 168. The sample was selected by using systematic random sampling techniques from the given sample frame.

Using the systematic random sampling techniques given sample frame approaches from the total the total trade participant which was 329 systematically selected (determined) using the following systematic scientific formula.

$$No = \underline{(t)^2 * (p)(q)}$$
$$(d)^2$$

Where t = value for selected alpha level of .025 in each tail = 1.96.

d = acceptable margin of error for proportion being estimated = 0.05

(p)(q) =estimate of variance = .25 (Taking p 0.5 gives the maximum sample size)

No =
$$(1.96)^2 * (0.5)(0.5) = 384$$

 $(0.05)^2$

Therefore, since the initial sample size is greater than 5% of the population (329*.05=16.45) Cochran's (1977) correction formula should be used to calculate the final sample size.

These calculations are as follows:

$$n_1 = 384 = 177.7$$
 $(1+384/329)$

Where the population size = 329

No = required return sample size according to Cochran's formula (1977)

 n_1 =required return sample size because sample greater than 5% of population.

Accordingly, the researcher distributes the questionnaires by looking their list of the trade participant.

Additionally, key informant interview was held with knowledgeable informants, who among others include warehouses operation officers, client and membership relation officer, quality grading officers, and other potential informants who were located in four delivery centers. Such as: Hawassa, Dilla, Dirdawa and Jimma. It stores Sidama, Yirgachiffe, Hareri and Jimma coffee respectively. The above reference coffees are selected top four out of nine based on the share of the trading volume in ECX (Commodity Exchange, 2013). The interview was made for branch key informant through telephone interviews.

In view of the fact that the sample frame consists of homogenous membership type categories, the appropriate sampling technique for the research was found to be systematic random sampling technique.

3.3 Data Analysis Techniques

The data collected through the aforementioned research tools were organized in a way suitable for analysis using computer software. A descriptive method of data analysis was employed using Statistical Package for Social Scientists (SPSS) Version 16 for Windows Software.

CHAPTER FOUR

4. Results and Discussion

"Questioning is the door of knowledge" - Irish proverb

The study employed both quantitative and qualitative research tool in order to produce a richer and more factual report. To identify the internal and external challenges of Ethiopian commodity exchange on coffee, the study employed a survey questionnaire and unstructured interviews.

From the total of 177questionnaires that are distributed 168 have been filled properly and returned. This indicates that the response rate is 95%. The results given below are based on these returned questionnaires.

4.1 Socio – Demographics of respondents

Table 4.1: Socio – Demographic Data of respondents

		Frequency	Percent	Mean
				1.58
Age of the respondents	20-30	78	46.4	
	31-40	84	50.0	
	41-50	5	3.0	
	Above	1	.6	
	Total	168	100.0	
		Frequency	Percent	Mean
Educational status				4.22
	Illiterate	0	0	
	Read and write	0	0	
	Primary level	4	2.4	
	secondary level	123	73.2	
	Tertiary	41	24.4	
	Total	168	100.0	
		Frequency	Percent	Mean
		1		1.55
Major occupation	Merchant	131	78.0	
	Student	6	3.6	
	Government employee	6	3.6	
	Farmer	25	14.9	
	Total	168	100.0	

Source: Survey data, 2013

As depicted above in table 4.1, explain about the age category of the respondents, 50% of them found to be within the range of 31-40 age groups, which is believed to be highly committed age group and 46.4 % of found 20-30 while the rest of the participants 3% were found to be the range between 41-50 and only 0.6% are the age in the above 50. The sample mean were 1.58. The mean reflect that most of the respondents are the age between the age "between" 31-40 years.

As shown in table 4.1above 73.2 % of the respondents were attending secondary education whereas 24.4 % of the respondents had tertiary level and only 2.4% had primary level. The sample mean is 4.22. This reflects that the educational statuses of majority of the respondents are secondary level.

Regarding the occupation of participants, majority of the respondents 78% were found to be full time merchants. The rest of the respondents 14.9%, 3.6% and 3.6 % were farmers, government employees and students respectively. This implies that respondents were participating in the Ethiopian commodity exchange as par timers. The sample mean are 1.55. This reflects that most of the respondents are full time merchants.

Chart4.1:- Years of starting to participate at ECX

The chart 4.1 as depicted in the below explains on years of the respondents starting to participate ECX

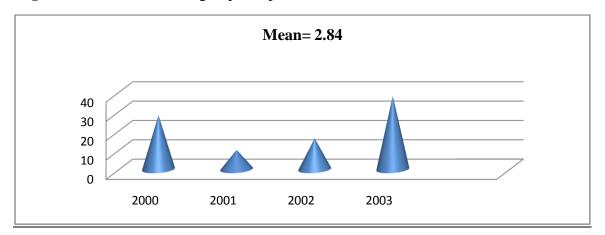


Figure 4.1:- Years of starting to participate at ECX

Source: Survey data, 2013

Concerning with the starting year of the trade participants, majority of the respondents 38.7% were started to participate since in 2003. The rest of the respondents 28.6%, 17.3% and 15.5%,

started to participate in the years 2000, 2001 and 2002, repetitively. The sample mean shows 2.84 .It implied that majority of the respondents begin to attend since in 2003.

4.2 Challenges of Ethiopia Commodity Exchange on Coffee

4.2.1 Market Information

Market information is the fundamental precondition for the successful realization of the business. It is the basis for all exchange decisions. One of the primary functions of an Exchange is coordinating buyers and sellers. Related to this, an Exchange creates market transparency by providing information on product grades, on prices, and on offers and bids for given products. This signals opportunities for profitable trade; it levels the playing field between farmers and others with better information; and it opens up new markets within and outside of the country (Commodity Exchange, 2013).

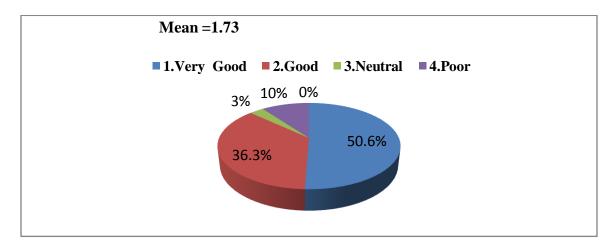
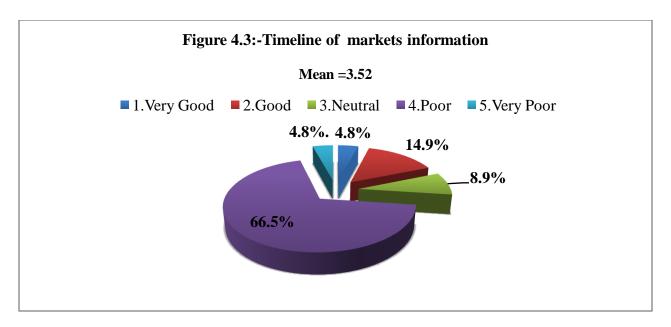


Figure 4.2: Delivering Accuracy of Market Information

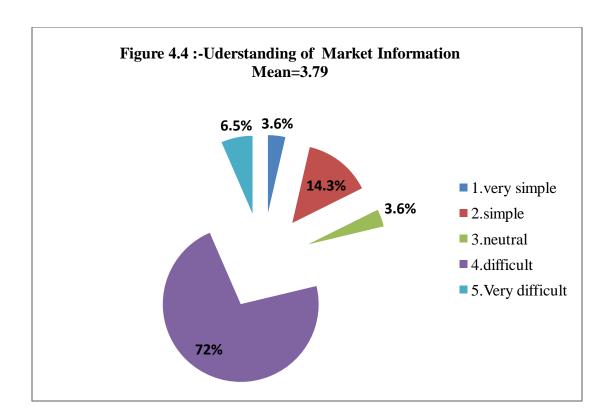
Source: Survey data, 2013

One of the basic attributes of market information is: the information should be accurate/truthful, and reliable. The result in the above figure 4.2 shows that, delivering accurate market information to the trade participant from ECX. 50.6% respondents were found very good. While 36.3 %, 10%, and 3% says good, poor, neutral and very poor respectively. When we see the sample mean are 1.73. This shows that majority of the respondents assure that ECX has in a good performance to deliver accurate information.



Source: Survey data, 2013

The second output in the above figure 4.3 shows that the ease of access seasonal market information by trade participants when they needed. Significant number of respondents (66.7%) reported poor accessibility of seasonal market information. The rest 14.9% of respondents said good, 8.9%, 4.8%, and 4.8% and said neutral, very poor and very good respectively. Finally, the sample mean reflects that 3.52. This sample mean clearly shows that most of the respondents had lack of /poor accessibility of seasonal market information. According to Tollens (2006), supports in his study cited that the absence of easily accessible seasonal market information for farmers or small traders leads to lack of market transparency, low down bargaining power of the buyers and sellers, low and highly fluctuation prices due to market inefficiency, coexistence of surplus and deficit areas due to weak spatial combination of markets, high risks, low produce quality and high losses, high transaction costs and insufficient production to satisfy consumer demand.



Source: Survey data, 2013

The third result in the above figure 4.4 explain that the market information understandability of the customer that are displayed by Ethiopian commodity exchange. The trade participants of (72%) responded that are difficult to understand the information whereas 14.3% of the respondents said simple to understand and the rest of 6.5 %, and 3.6% responded very difficult and very simple to understand the information respectively and only 3.6% of the respondents were kept silent on the matter. Lastly, the sample mean reveals 3.79. The sample mean shows that most of the respondents are facing difficulty to understand the information that is released by ECX. According to key informant interviews the nature of task depend on technology may broadcast the information through electronically in the form of code. At this time the trade participants sometimes face difficult to understand the information that are disseminated by ECX.

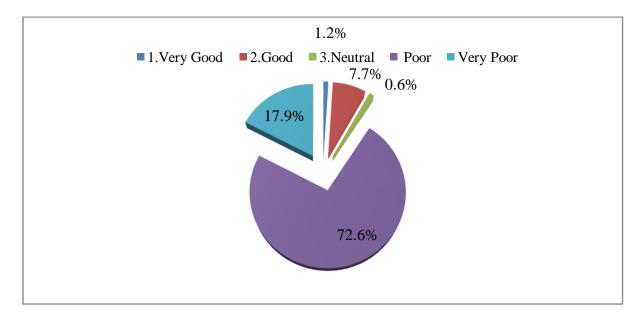
4.2.2. Shortfall of agricultural product

The key informant interviews said that one of the basic challenges of ECX is shortfalls of exported agricultural product. The nature of products sometimes affects Ethiopian Commodity Exchange. There is the case few product loss their weights after months. E.g. Coffee, Coffee that has absorbed too much moisture, particularly from exposure to humid environment for short period of time. After a months ago starting losing its weight from 1-5kg after entering in to the warehouse. Subsequent to entering in to the warehouse ECX is responsible to cover the cost of losing weight amount at the time of making the goods ready to ship. To avoid this problem ECX were working moisture adjustment but still they can't get a significant result.

4.2.3 Physical Infrastructure

According to Rashid (2010), communications and transportation infrastructure is critical to a functioning exchange. First, trade at a futures exchange requires a communications network that can provide traders with spot market information in order to estimate the basis. A commodity exchange also needs to be supported by a reliable system for transportation and distribution, so that delivery location can be credibly specified in the contract. Moreover, transaction costs must be stable enough for traders to evaluate the spread between the spot and futures contract prices. Infrastructure must not only support the exchange, but it must also link various spot markets if the exchange is to function successfully. Ideally, the physical and communications infrastructure will ensure information regarding product quality, quantity, form, and price in all relevant markets is available across various spot markets. In the absence of this information, price discovery in the spot markets may be erratic and price risk will not be manageable in a futures exchange. So to a commodity market like ECX, to functioning the exchange successfully physical infrastructure plays a significant role.

Figure 4.6:- Physical infrastructure Mean = 3.98



Source: Survey data, 2013

As described above in Figure 4.6 shows that physical infrastructure facilities like power, road and communication to run their business. From the respondent 72.6% responded that there is an existence of poor physical infrastructure and 17.9% of the respondents responded that very poor. While the remaining 7.7%, 1% and 0.6% of responded good, very good and neutral respectively. The mean of the sample show that 3.98. The sample mean explain that majority of the respondents are agreed that the existence poor physical infrastructure. As his finding Shahidur, et al., (2010) found that countries with successful exchanges have far more developed communications and/or transportation infrastructure than countries with less successful exchanges

Key informant interview indicated that, ECX transacted product are coming from rural part of the country. Before storing the items, first the product should be shipped and transported. To transport exported bulk goods, transportation especially road played significant role. However, when we see the road infrastructure of Ethiopia are not adequate enough and inconvenience to transfer the goods easily from one place to another one. Therefore, directly or indirectly weak physical infrastructure like road is one of the hindering challenges of the day to day operation of ECX. Apart from above, shortage of power supply is another problem ECX. Because, each activities of ECX like clearing payment, grading products, exchange and disseminate of

information across branches as well as to the customer, ordering the goods from warehouse delivery center, etc. are requires adequate power supply. Especially, in case of quality grading, in particular coffee require large power supply. However, ECX can't get adequate power supply from the concerned organization. Due to this fact, it mostly happen job crowdedness of the task, delay to update the information, late to cleared out the payment etc. To avoid power related problem, ECX has purchased a generator but still that is not sufficient enough. At the same time, the nature of the task accomplished by ECX creates technological dependency. To put into practice day to day activities like process post buying and selling activity, to display price related information, to process the transaction from warehouse delivery center needs to use computer network technology like an internet. An organization like ECX needs their own satellite, because per a day made many transactions. Those transactions need privacy. Generally, the whole activities of ECX are dependent on technology. But still the organizations are using a public network. These are the negative impact on the efficiency of ECX. In addition to the above reason, the other is network infrastructures of Ethiopia are poor. Those are the basic contingent challenge of ECX.

Table 4.2: Indicators of communications and transportation infrastructure

	Country	Total road net work Km	% of paved roads	Subscribers per 1000 people		Internet users per 100 people
				Ground line Phone	Mobile Phone	
1	Ethiopia	44,359	13.7	1	8	0.7
2	Ghana	109,515	12.6	1	71	9.5
3	Kenya	61,945	14.3	1	62	25.9
4	Malawi	15,451	45.0	1	20	2.3
5	Nigeria	193,200	15.0	1	55	28.4
6	South Africa	362,099	17.3	8	99	12.3
7	Uganda	70,746	23.0	1	38	12.5
8	Zambia	66,781	22.0	1	42	10.1

The above tables 4.2 are the reports of World Bank since 2010 complied from world development indicator. It shows the comparison of the African countries with respect to

communication and transportation infrastructure that are establishing the commodity exchange market.

The above table 4.2, indicated that South Africa has 362,099 total road network km, Nigeria has 193,200 total road network Km, Ghana has 109,515 total road network Km, Uganda has 70,746 total road network Km, Zambia has 66,781 total road network Km, Kenya has 61,945 total road network Km, Ethiopia has 44,359 total road and lastly, Malawi has 15,451 total road network. From the given finding one can understand that South Africa holds a large total road network Km among others African countries who opened the commodity market. On the contrary, Ethiopia next from Malawi has small total road network Km. When we see the paved of the road, Malawi has the first one holds 45.0%, Uganda has the second holds 23%, Zambia has 22% South Africa has 17.3%, Nigeria 15%, Kenya has 14.3% Ethiopia has 13.7% and Ghana has 12.6% of paved road. This result shows that Ethiopia and Ghana have small paved road among the given African countries. Poor infrastructure has an impact on commodity exchange. According to Shahidur, et al., (2010) Communications and transportation infrastructure is critical to a functioning exchange.

When we see the communication infrastructure, subscribers per 100 people for ground line South Africa has the first form 100 people 8 individuals are ground line subscriber and the remaining 7 countries has only 1 individual that are subscriber of ground line phone from out of 100 peoples. In the case of mobile phone the same as ground line phone, South Africa has the first one from 100 people 99 individual are mobile phone subscriber, Ghana has 71 individual, Kenya has 62 individuals, Nigeria has 55 individuals, Zambia has 42 individuals, Uganda 38 individuals, Malawi has 20 individuals and lastly Ethiopia has 8 individuals are mobile subscriber from 100 peoples. When we see the internet subscriber, Nigeria has majority subscriber. It holds 28.4 individuals are internet subscriber, 25.9 individuals holds Kenya, 12.5 individuals holds Uganda,12.3 individuals holds South Africa,10.1 individuals holds Zambia, 9.5 individuals holds Ghana, 2.3 individuals holds Malawi and 0.7 individuals holds Ethiopia. According to, Shahidur et al., (2010) found that countries with successful exchanges have far more developed communications and/or transportation infrastructure than countries with less successful exchanges.

4.2.4 Clearing and Settlement of Services

Financial institutions especially, banks can play an important role in settlement of obligations in the overall ecosystem including exchanges, members, clients, custodians, etc. As depicted in table 4.3 below, hold the assurance payment, protecting, matching each of buying and selling activities of Ethiopian Commodity Exchange and the impacts of price fluctuation to the trade participants as well as the impacts of current macroeconomic condition on ECX.

Table 4.3: Payment and Price Related Result

		Frequency	Percentage	Mean
1	Assures payment to seller			2.06
	1. Strongly agree	36	21.4	
	2.Agree	109	64.9	
	3.Neutral	3	1.8	
	4.Disagree	17	10.1	
	5. Strongly disagree	3	1.8	
	Total	168	100.0	
2	Matching up of each buy and sell transaction			2.16
	1. Strongly agree	22	13.1	
	2.Agree	114	67.9	
	3.Neutral	18	10.7	
	4.Disagree	11	6.5	
	5.Strongly Disagree	3	1.8	
	Total	168	100.0	
3	Protecting the integrity of the market place			
	1.Strongly agree	19	11.3	2.29
	2.Agree	112	66.7	
	3.Neutral	10	6.0	
	4.Disagree	24	14.3	
	5.Strongly disagree	3	1.8	
	Total	168	100.0	

Source: Survey data, 2013

In the table 4.3, above the first question which is related to the payment assurance by ECX and the result reveal that 64.9% are make sure (agree) on the payment after the transaction and at the same time 21.4% of respondent strongly agreed that the payments. However the remaining respondents 10.1%, 1.8% and 1.8% responded that disagree, strongly disagree and neutral the

payment respectively. The sample mean were 2.06. This implies majority of the respondents confirmed that Ethiopia Commodity Exchange assure the payment to the seller.

Key informant interviews also assure that one of the objectives of ECX are avoiding default risk by assuring the payment to the seller after the transaction made by using T+1(transaction period plus one day) rules.

The second result shows that the matching each buying and selling activity. About 67.9% respondents were agree that ECX were able to match the buying and selling activity and 13.1% were strongly agree and 10.7% are keep in silent to select other options. Whereas only 6.5 and 1.8% are disagree and strongly disagree. The samples mean were 2.16. It indicated that most of the respondents are agreed that the existence of ECX create matching each buyer and seller.

The third result in the above table 4.3, demonstrates that protecting ECX for creating the integrity of the market. It show that 66.7% respondents agreed that ECX are creating an integrity of market and 11.3% of the respondents also strongly agreed. The remaining 14.3%, 6% and 1.8% are disagree, neutral and strongly disagree. Finally, the sample mean were 2.29. As a sample mean, explained that large number of respondents said that ECX are creating market integrity.

4.2.5 Macroeconomic Stability

Macroeconomic stability is important to any venture including services outsourcing operations. Economic instability can introduce a range of operating risks including price instability and exchange rate fluctuations. It is often argued that macroeconomic instability can form a binding constraint on economic growth.

Table 4.4:- the impact of macroeconomic instability

1	The current macroeconomic instability has an impact on	Frequency	Percentage	Mean
	Ethiopian Commodity exchange			
				2.30
	1.Strongly agree	21	12.5	
	2.Agree	110	65.5	
	3.Neutral	6	3.6	
	4.Disagree	27	16.1	
	5.Strongly disagree	4	2.4	
	Total	168	100.0	

Source: Survey data, 2013

The results as depicted on the above table 4.4, the impact of current macroeconomic condition on ECX. About 65.5% respondents believed that current macroeconomic instability has an impact on in Ethiopia Commodity Exchange and 12.5% are strongly agreed. Whereas 16.1% and 2.4% of the respondents responded that disagrees and strongly disagrees. On the other side 3.6% of the respondent are neither agree nor disagree. Finally, the sample mean was 2.30. The mean tells that most of the current macroeconomic condition has an impact on the trading activity

From the open-ended questions the researcher gets the information from the respondents about the impacts of instable macroeconomic condition. They said that instable macroeconomic policies are exposed to price fluctuation this may create inflation. It means that may raise devaluations of the national currency. Meanwhile, the general expectation of devaluation tended to depress exports broadly and exacerbated a balance of payment crisis, when government desperately needed foreign exchange.

According to key informant interviews indicated that, a commodity exchange, particularly futures trade cannot be developed and sustained in the absence of sound policies for monetary management and foreign trade. In particular, macro-economic policy needs to maintain stable and reasonably undistorted real interest rates, exchange rates and inflation rates. Clearly, macro policies have broader implications, but they can be critical for a commodity exchange. For example, even after the government of Ethiopia dismantled the coffee auction floor and required all Ethiopian coffee to be exported through the ECX, preferred to hold the commodity rather than to sell. One explanation for this behavior is that the Ethiopian Birr was highly overvalued and there was a rumor that there would be devaluation of 20-30 percent. Under those circumstances, holding stocks made perfect sense to the exporters, as devaluation would generate larger profits for them. Meanwhile, the general expectation of devaluation tended to depress exports broadly and exacerbated a balance of payment crisis, when government desperately needed foreign exchange. This exchange crisis may have from 80 exporters who had been reluctant to sell. In any case, the Ethiopian experience clearly demonstrates the relevance of a sound macroeconomic environment and stable exchange rates in developing and sustaining an exchange. In similar manner efforts to maintain unsustainable interest rates affect behavior Ethiopian commodity exchange and volatile inflation rates also depress the activities of the exchange.

4.2.6 Price Volatility

The apparent higher average prices are benefit to producer as well as for trader; the corresponding volatility has imposed greater demands on price risk management for farmers and grain handlers'. Unusual commodity market volatility has created uncertainty around the accuracy of prices and in the potential loss of the majority price shifting tool producer as well as grain handler. Price fluctuation is a practice frequently used at the moments of demand decrease either to stimulate it when the production surplus or shortage occurs.

Table 4.5 the impacts of Price Volatility

1	The influence price fluctuation to the participants	he producer/trade	Frequency	Percentage	Mean
					2.29
		1. Strongly agree	18	10.7	
		2. Agree	111	66.1	
		3.Neutral	14	8.3	
		4. Disagree	22	13.1	
		5. Strongly Disagree	3	1.8	
	Total		168	100.0	

Source: Survey data, 2013

As expressed in the above table 4.5, the result shows that 66.1% of the respondents are agreed on the fluctuations of price have an impact on the trading activity and at the same time 10.7% of the respondents strongly agreed on the impacts. However, 13.1% are disagree and 1.8 % strongly disagree and only 8.3% of the respondents were remain neutral. The sample mean were 2.29.It indicates that significant number of the trade participants electrify fluctuations of price has a negative impact on the trade participants. According to (Chaveriat,2000) in his finding during the fluctuation of coffee price since 2000's fell in to their lowest ever in real terms and producer had take their children's out of the school because they could not afford the fees.

4.2.7 Warehouse

To sell agricultural products through ECX, a seller is required to deposit goods at an ECX warehouse. There the goods are labeled by type and origin (in the case of coffee) and be given a quality grade according to a standardized set of measurements. For coffee, grade 1 is higher

stand grade 10 is lowest. These combinations of labels (called a symbol) together identify the type of product that is being sold, e.g.WSDB3for washed coffee from the Sidama B region of grade 3 or ULK8 for unwashed coffee from the Lekempti region of grade 8.Once the grading process is completed, the seller is given warehouse receipt, which can later be sold to a buyer through the exchange (JakobRogstadius, 2009).

Table 4.6:-Warehousing

		Frequency	Percentage	Mean
1	How do you rate: The warehouse capacity to hold all			3.71
	requests by ECX participant			
	1. Very good	6	3.6	
	2.Good	29	17.3	
	3. Neutral	2	1.2	
	4. Poor	102	60.7	
	5. Very poor	29	17.3	
	Total	168	100.0	
2	The quality of the service of the warehouse			3.52
	1.Very good	5	3.0	
	2. Good	38	22.6	
	3. Neutral	13	7.7	
	4. Poor	89	53.0	
	5. Very poor	23	13.7	
	Total	168	100.0	
3	The warehouse storage cost			3.74
	1.Very cheap	4	2.4	
	2.Cheap	24	14.3	
	3. Fair	10	6.0	
	4. Expensive	104	61.9	
	5. Very expensive	26	15.5	
	Total	168	100.0	
4	How do you evaluate the time given to store and transfer			3.60
	your commodity			
	1.Very enough	8	4.8	
	2.Enough	31	18.5	
	3 Fair	5	3.0	
	4.Low	100	59.5	
	5.Verylow	24	14.3	
	Total	168	100.0	
5	The penalty cost for the delay made to withdraw the commodity.			2.47
	1. Very high	46	27.4	

	2. High	57	33.9	
	3. Fair	12	7.1	
	4. Low	42	25.0	
	5. Very low	11	6.5	
	Total	168	100.0	
6	The security of which protect from causality like theft and			2.36
	fire?			
	1. Very good	46	27.4	
	2. Good	60	35.8	
	3. Neutral	12	7.1	
	4. Poor	42	25.0	
	5. Very poor	11	6.5	
	Total	168	100.0	

Source: Survey data, 2013

As depicted table 4.6, above reveals that warehouse facility of ECX. Like the capacities of the warehouse, the quality service of warehouse, the warehouse storage cost, and time given to store and transfer your commodity etc.

The first result in the table 4.6, above shows that, 60.7% respondents react that Ethiopian Commodity Exchange have poor/inadequate warehouse to dump the products and also 17.3% of the respondents agreed that, ECX has very poor/inadequate warehouse facility. While the remaining of 17.3%, 3.6% and 1.2% of the respondents said good, very good and neutral respectively. Finally the samples mean was3.71; this implies that significant number of respondents said that ECX has a shortage of warehouse facility. According to (Issac Paul 2011) his finding supports that one of the basic challenges of Ethiopia commodity exchange limited number of storage and unfamiliar for future market.

The second result in the table 4.6, above shows that, the quality of the service delivered by ECX warehouse. About 53% respondents found that poor in qualities of service that are provided by the warehouse. At the same time 13.7% respondents assure that very poor quality service are provided by ECX warehouse. On the contrary side 22.6% and 3% of the respondents believed that ECX has provide good and very good warehouse quality service. The only 7.7 % of respondents were remain neutral. Lastly, the sample mean reflects 3.52. The result of the mean indicated that majority trade participants are not cheerful by the quality warehouse service of ECX.

The third result in the table 4.6, above shows that, the opinions of the trade participants on the cost of ware house storage. From the valued respondent 61.9% said that ECX storage costs the warehouses are expensive and also15.5% of respondents said that very expensive. On the other side few respondents 2.4% and 14.3% said that, ECX storage costs were cheap and very cheap respectively. Only the remaining 6% of the respondents agreed and reveal that ECX has charging a reasonable/fair storage cost of the warehouse. Last of all, the samples mean was 3.74. This signifying that majority of trade participants held that the cost of storage charged by ECX are expensive.

The fourth results in the table 4.6, above shows that, time given to store and transfer your commodity. About 59.5% respondents found that low time to store and transfer the commodity that are given by Ethiopian commodity exchange and 14.3 % also said that very low time to store and transfer. Whereas, 18.5% and 4.8% of respondents said that the time given by ECX to store and transfer the commodity is 'enough' and 'very enough' respectively. The only 3% the respondents said reasonable time are given to store and transfer the commodity. The sample mean are 3.60. From the given sample mean one can understand that the time given to store in to the warehouse and transfer the commodity to the buyer is not enough.

The last one result in the table 4.6, above shows that, the security of which protects from causality like theft and fire. From the given respondents 35.8% and 27.4% are replied that good and very good security protection of causality from theft and fire respectively. While the rest of 25% and 6.5% are replied poor and very poor security protections respectively. The remaining 7.1% are neutral. The sample mean was 2.36. This indicates that ECX has a good security market protection of causality theft and fire.

4.2.8 Quality Grading Challenge Related Results

Samples of the same commodity can differ in terms of moisture content, impurities, safety standards, and many other features. For a commodity to be tradable in a futures market, it must be subject to grades and standards that account for relevant attributes. With workable standards, futures contracts can identify specific characteristics and allow for standardized discounts when contract specifications are not met at delivery. Many African countries have grades and standards for major export commodities, as well as functioning auction markets for these commodities. For

cereals, formal grades and standards are less common, and countries may need to develop or improve their systems of grades and standards before setting up cereal exchanges (Shahidur Rashid Alex Winter-Nelson and Philip Garcia, 2010).

Table4.7: Quality Grading

		Frequency	Percentage	Mean
1	Quality grading specialists are free from corruption at			3.74
	the time of taking a sample			
	1.Strongly agree	8	4.8	
	2.Agree	19	11.3	
	3.Neutral	2	1.2	
	4.Disagree	119	70.8	
	5. Strongly disagree	20	11.9	
	Total	168	100.0	
2	Does the warehouse equipped with grading laboratory			2.24
	1. Strongly agree	18	10.7	
	2.Agree	118	70.2	
	3.Neutral	10	6.0	
	4.Disagree	18	10.7	
	5.Strongly disagree	4	2.4	
	Total	168	100.0	
3	Does the warehouse have professional controller?			2.42
	1. Strongly agree	11	6.5	
	2.Agree	114	67.9	
	3.Neutral	11	6.5	
	4.Disagree	25	14.9	
	5. Strongly disagree	7	4.2	
	Total	168	100.0	

Source: Survey data, 2013

As depicted in the above table 4.7 holds quality grading related results. In first finding 70.8% respondents are disagree that the quality grading specialists are free from corruption. As well as also 11.9% of the respondents are strongly disagree. Whereas 11.3% and 4.8% of the respondents are agree and very agreed on a specialists are free from corruptions. The remaining 1.2% of the respondents kept silent to say anything. Finally, the sample means was 3.74. This implied that at the quality grading processes of ECX are exposed for corruption. According to key informant interviews, products are grading their quality in a different way like checking through standardized machine, moisture determination through calibration etc. Take the best example coffee 40% were passed through the above grading system and the remaining 60% were

passed through testing by 3 professionals. At this time may be subjectivity happen and some of the individuals are an intentional or intentionally giving a wrong grade to get some sort of bribe. If their disagreement gaps are wide between the professionals it may pass to the third party. Even if, it may checked by the third party, no one make sure that free from corruption.

The second result in the above table 4.7 shows, that warehouse equipped with grading laboratory. 70.2% of trade participant were agreed, and 10.7% strongly agreed. But 10.7% and 2.7% of the respondents were disagreed and strongly disagree the warehouse equipped with grading laboratory respectively. The remaining 6% are neither agree nor disagree. The sample mean were 2.17. This reflects that ECX warehouse has equipped with grading laboratory.

The last result in the above table 4.7 explain that the warehouse have professional controller. 67.9% respondents agreed that the warehouse have adequate professionals.6.5% of the respondents were strongly agreed. However, few participants 14.9% and 4.2% were not agreed and strongly disagreed in that order. The only 6.5% are keep silent to select either agree or disagree. The sample mean was 2.42. This implies that ECX has warehouse professional controller.

4.2.9 Financial accessibility by the market actors

The country has good financial service provider that reduce costs of moving funds between borrowers and lenders (savers), facilitating easily accessibility of provision liquidity, leading to more allocation of resource and faster economic growth. Indirectly this is the result of the existence of good financial system. On the contrary, the country has poor/shortage of financial service provider that exposed to increasing the cost of moving funds between borrowers and lenders. This is one of the bottleneck factors of economic growth.

Table4.8:- Liquidity related finding

		Frequency	Percentage	Mean
1	Source of credit			3.39
	1. Government institutions	6	3.6	
	2.Micro finance institution	3	1.8	
	3. Bank	98	58.3	
	4.Iqub	42	25.0	

	5.Friends/relative	19	11.3	
	Total	168	100.0	
2	Store credit (warehouse receipt) facility?			3.87
	1.Very good	11	6.5	
	2. Good	33	19.6	
	3.Neutral	6	3.6	
	4. Poor	90	53.6	
	5.Very poor	28	16.7	
	Total	168	100.0	
3	Since if you get the credit, how do you describe the interest rate that you pay for the aforementioned financial institution?			1.48
	1.Very high	21	12.5	
	2.High	82	48.8	
	3.Fair	40	23.8	
	4.Low	4	2.4	
	5. Very low	18	10.7	
	6. I don't know	3	1.8	
	Total	168	100.0	

Source: Survey data, 2013

As result of the study verified in above table 4.8 shows that ,about 58.3 % of respondent replied that the major source credit are bank, the remaining 25%, and 11.3% ,3.8 % and 1.8% respondents were respond that Iqub, Friends/relative, Government institutions and micro finance institution respectively. The sample mean (3.39) indicates that most of trade participants are getting credit from banks.

The result of the study above table 4.8 revealed that 53.6% of the respondents replied the Ethiopian commodity exchange poor in facilitate and communication with banks to give a store credit for the participants. Plus 16.7% of the respondent told that very poor in a store credit facility to the participants. In contrary, 19.6% of the respondents are agreed that ECX are facilitating store credit service to the trade participant and also 6 % of the respondents are very agreed. On the other hand few respondents 3% are keep in silent to say either provides a store credit service or not to provide. Finally the sample mean (3.87) indicated that ECX plays insignificant role to facilitate store credit service to trade participant. Furthermore, according to Gideon O. E. (2010) Liquidity in the agricultural trade can be enhanced if a lender aversion to the provision of inventory finance is addressed through the development of credible warehouse system which allows stored commodities to binding of the research was found coinciding.

As the result of above table 4.8, revealed that interest related the study depicted in the below table verified that about 48.8 % respondents confirmed that the banks are charged high interest of borrowing. In addition 12.5% of the respondents replied that very high interests are charge by the banks and by other institutions. In contrary to the aforementioned result 23.8% of the respondent's speaks the interests are fair that are charged by credit provider institution. Whereas few respondents 10.7% and 1.8 % confirmed that the interest charged by any lender institution are low and very low respectively. On the other hand 4% of the respondents are having no idea about the interest charged by the lender institutions. The sample mean (1.48) indicated that majority of trade participants said that the interest charged by the financial institution are high.

From the open ended question the respondent replied that to get some sort of store credit receipt facility it should be expected to pass a long chain and even finally the possibility to get a credits are also rare.

4.2.10 Trading practice

As results of on spot observation and document analysis revealed, the ECX was applying open outcry trading system. Although electric trading is practically preferred and employed all over the world as a means of facilitating the exchange system, the system is not yet here in ECX as a means of due to poor ICT infrastructure and awareness problem of ECX participants. According to result of key informant interviews price movement, ICT related problem, lower speed transactions were found to be the major problem associated with the open outcry trading system. Consist with this; findings of Thomas Robin (2008) revealed that electronic trading leads to reduce the price movement, lower volatility, lower risk in the market and higher liquidity by increasing the speed of transactions and lowering transaction costs.

Table 4.9:- Trading Practice

		Frequency	Percentage	Mean
1	Categories of membership did you participate?			1.00
	Full trading member	168	100.0	
	Full intermediary member	0	0.0	
		0	0.0	

	Timbertan din amandan		0.0	
	Limited trading member	0	0.0	
	Limited intermediary member	0.	0.0	
	Full trading member			
	Total	168	100	
2	The membership seat fee of the ECX?			1.39
	1. Very Expensive	120	71.4	
	2. Expensive	35	20.8	
	3. Fair	8	4.8	
	4.Cheap	5	3.0	
	5. Very cheap	0	0	
	Total	168	100	
3	The membership requirement of the ECX?			2.93
	1.Very encouraging	55	32.7	
	2. Encouraging	15	8.9	
	3. Neutral	0	0.0	
	4.Discouraging	82	48.8	
	5. Very discouraging	16	9.5	
	Total	168	100.0	
4	To be a full membership what are the major factor?			1.70
	1. Limited membership seat	53	31.6	
	2. Shortage of capital	115	68.5	
	3. Other	0	0	
	Total	168	100.0	
5	What type of exchange trading contract do you currently			1.00
	use?			
	1. Spot transaction	168	100.0	
	2. Future	0	0	
	3. Forward transaction	0	0	
	Total	168	100.0	
6	Do you describe Ethiopian Commodity Exchange in terms			1.48
	of transaction costs?			
		1		

1. Reduced transaction		113	67.3	
2.Increased transaction cost		30	17.9	
3. No difference with the traditional	trading system	25	14.9	
Total		168	100.0	

Source: Primary Source of Data, Close Ended Questionnaires

As depicted in the above table 4.9 holds the results of the trading practice Ethiopian Commodity Exchange.

The first result in the above table 4.9, tells about the membership categories of ECX. In the past there are four membership categories. Such as full trading members, intermediary trading member, limited trading member and limited intermediary member. According to the result over all 100% of the respondents are members of full trading member. The mean are 1.00. Mean of the sample reflect that almost all trade participants are full trading member. According to the results of key informant interviews in the previous year there are four membership categories but currently they are coming to in one category.

The second output in the above table 4.9, reveals that membership seat fee of the ECX charged to the trade participant, majority of respondents 71.4% also agreed that very expensive plus 20.8% of the respondents are replied that expensive. On the contrary side 4.8 % respondent the membership seat fee are fair. On the other hand few respondents 3% were said those membership seat fees are cheap. Finally the mean 1.39, this also indicates that most of trade participants are tells that the expensiveness of the membership seat fee charged by ECX.

The third output in the above table 4.9, shows that the membership requirements of ECX. Majority of the respondents 48.8% are not encouraging by the requirement. Plus 9.5% of the respondents also strongly discouraged. While 32.7% and 8.9% the respondents are very encouraging and encouraging in that order. The sample mean are 2.93. This implies that majority of the respondents are not satisfying/discouraging by the membership requirements of ECX.

The fourth result in the above table 4.9, express that the major factor to participate the full trade membership. Majority about 68.5% of the respondents replied that shortages of capital and the remaining 31.6 % of respondents said that limited membership seat. Lastly, the sample means

1.70. It shows that the major factors of the trade participant to be a full membership are shortage of capital.

The fifth result in the above table 4.9 shows types of transaction that the trade participants attained. Almost all respondents 100% replied they attainting spot transaction. The mean are 1.00. This reflects only spot transaction are available in Ethiopia Commodity Exchange. From the open ended results was asked the way to escape from price fluctuation. They replied that, there is no alternative way. With regard to the contractual agreement, on spot observation and document analysis result reveled that Ethiopian commodity exchange were practically employing spot contract agreement system. As results of key informant interviewee revealed this trading agreement system was not such encouraging and promising due to problems associated with price fluctuation.

The last result in the above table 4.9 holds the transaction cost of Ethiopia Commodity Exchange. 67% of respondents replied that reduce the transaction cost. On the contrary few respondents 17.9% confirmed that increase the transaction cost .On the other there side 14.9% of the respondents replied that there is no difference with traditional system. Finally the sample mean (1.48) reflects that Ethiopia Commodity Exchange can able reduce transaction cost. According to key informant interview even if there are a lot of hindering factor to succeed, ECX operation can reduce the transaction cost by short cutting long pass transaction processes avoiding unfair user brokers. In addition can reduce the problem that are raised traditional marketing like create market transparency, creates trust on the transaction and the like.

The key informant interviews also mentioned that ECX can enable to reduce problem associated with the old and traditional agricultural exchange market. Such as, an exchange provides a mechanism for increasing market liquidity, an exchange enables transfer of price risk, an exchange avoid contract default risk, an exchange creates market transparency and an exchange reduces transaction costs by: Facilitating contact between buyers and sellers, enabling centralized grading of products, transmitting information about prices and volumes, ensuring that contracts are enforceable, providing mechanism for price discovery, simplifying transactions with standard contracts

4.2.11Regulatory

A commodity exchange must be supported by appropriate legal infrastructure, particularly (i) a system of grades and standards, (ii) a credible system of contract enforcement, and (iii) governance in spot markets. In most African cereals markets such a system of grades and standards is not likely to evolve without government involvement (ShahidurRashid.et al, 2010).

Table 4.10: ECX regulation

		Frequency	Percentage	Mean
1	Dishonest or irresponsible practice by the			2.23
1	counterparties, intermediaries or banks			2.23
	1.Very good	12	7.1	
	2. Good	127	75.6	
	3.Neutral	9	5.4	
	4. Poor	18	10.7	
	5.Very poor	2	1.2	
	Total	168	100.0	
2	Enforcing of contract			2.28
	1.Very good	8	4.8	
	2.Good	125	74.4	
	3.Neutral	18	10.7	
	4.Poor	14	8.3	
	5. Very poor	3	1.8	
	Total	168	100.0	
3	Arbitration mechanism for dispute settlement			2.34
	1.Very good	7	4.2	
	2.Good	121	72.0	
	3.Neutral	17	10.1	
	4. Poor	22	13.1	
	5. Very poor	1	.6	
	Total	168	100.0	
4	Running Constrains speculative excess			2.35
	1.Very good	8	4.8	
	2.Good	124	73.8	
	3. Neutral	7	4.2	
	4.Poor	27	16.1	
	5.Very poor	2	1.2	
	Total	168	100.0	
5	Reducing risk of default to acceptable level			2.32
	1.Very good	8	4.8	

2.Good	123	73.2
3.Neutral	16	9.5
4.Poor	17	10.1
5.Very poor	4	2.4
Total	168	100.0

Source: Primary Source of Data, Close Ended Questionnaires

As results of regulation related analysis of the study depicted in the above table 4.10 verified about 75.6 % of the respondents confirmed the good control of dishonest and irresponsible practice by counterparties, intermediaries and banks in the exchange process by the ECX authority. Plus 7.1% of respondents replied that very good sole control practice. In contrary to the aforementioned result, 10.7% and 1.2 % of the respondents replied that the authority did not control the irresponsible and dishonest act of the counterparties. Only 5.4 % of the respondent doesn't say anything about this particular question. Finally the sample means were 2.23. This reflect that significant number of respondents reveal that ECX has good control dishonest and irresponsible practice by the counterparties, intermediaries and banks.

As results of the analysis in the second one, in the above table 4.10 revealed 74.4% of the respondents were confident enough/good in the Ethiopian commodity exchange in enforcing contracts that were made among the participants as well as 4.8% of the respondents replied that very good ways of enforcing of the contract. In contrary to findings of this study, findings of Shahidur, et al., (2010) verifies that the real challenge in African commodity exchange is not the development of grades but the enforcement of contracts that use those goods. While 8.3% and 1.8% were portrayed the ECX has poor and very poor enforcing contracts that were made by the participants in the exchange respectively. Only 10.7% of the respondents are kept silent to select either of the two. The sample mean were 2.28. This reflect that majority of respondents said that the enforcing contract of ECX are good.

A result in the above table 4.10, regarding to the arbitration mechanism of ECX, about 72% and 4.2% of the respondents were satisfied/good and very good Arbitration mechanism for dispute settlement of the Ethiopian commodity exchange. In the other side 13.1% and 10.1 % of the study results was verified that the Ethiopian commodity exchange poor and very arbitration mechanism for dispute settlements correspondingly. Only 10.1% kept silent to say either Good

or poor. The sample means (2.34) designate significant number of the trade participant are admiring good dispute arbitration mechanism.

In the depicted above table 4.10 the fourth one, output explained that 73.8% and 4.8% of respondents portrayed/good and very good that the ECX authority regulates the speculative excess of the member participants. In contrary to this, 16.1% and 1.2% the respondents replied that the ECX authority poor and very poor control the speculative excess of the member participants. On the other hand 4.2% of the respondents are not taking sides either of the two categories. The sample mean were 2.35. This demonstrates that ECX authority regulates the speculative excess of the member participant.

A result in the above table 4.10, regarding to reducing default risk 73.2% and 2% of the respondents assure that ECX has good and very good handling of default risk. On the contrary side 10.1% and 2.4% respondents said that replied that ECX are poor and very poor in reducing of default risk. Only 9.5% of the respondents are neutral to say about reducing of default risk by ECX. The samples means were 2.32. This signify that ECX has good handling systems of default risk.

CHAPTER FIVE

5. Summery, Conclusion and Recommendation

"All things come to an end" - American proverb

5.1 Summery

The study conducted survey of challenges of ECX on coffee crops (using questionnaires) and unstructured interviews. A study has a response rate of ninety five percent. Fifty percent of the studies were the age between 31%-40%. When we see the educational status of the trade participant, 73.2% were secondary level. Major occupations of the respondents, 78% were full time merchant. 38.7% percent of the respondents are starting to participant since in 2003.

The one of the basic attributes of market information are: the information should be accurate/truthful, and reliable. About 50.6% of the respondents said that ECX has provided accurate market information. However 66.7% of respondents reveal that ECX are poor in providing seasonal market information. 72% of the respondent are said that the information disseminate by ECX are not easy to understand.

The key informant mentioned that one of the basic challenges of ECX were short fall of agricultural product and poor in physical infrastructure. 72.6% of the respondent also reveal that the existence of poor infrastructure.

The study with regarding to payment and clearance service, 64% of the respondents said that ECX assure the payment to the seller and also 67.9% of trade participant said that ECX matching up each selling and buying transaction. About 66.7% of the respondent also said that ECX has protecting integrity of market place.

The other constraints of ECX macroeconomic instability.65.5% of the respondents said that unstable macro economy has an impact on the activities of ECX. The key informant interviews

also support this fact. In line with 66.1 % of the respondents also said that price fluctuation has an impact on ECX.

The study shows that 60.7% of the respondents said that ECX still poor warehouse storage capacity and 53% of trade participant said poor in warehouse quality service.61.9% of the respondent reveal that the warehouse storage costs of ECX were expensive. 59.5% of the respondents said that, the time given to store and transfers the commodities were low. However 33.9% of the respondents were said that ECX has good in security protect from causality like theft and fire.

The study indicated that 70.8% of the respondents said that quality grading specialists are not free from corruption. However 70.2% of the respondents mentioned that ECX warehouse were good equipped grading laboratory and 67.9% of the respondents said that ECX has a professional controller. When we see the source of credit of trade participants, 58.3% of the respondents have taken from the bank. However 53.6% of the respondent implied that the store credit facilities of ECX were poor. Additionally, 48.8% if you get the credit you will exposed for high interest charge.

The result shows that all of the trade participants are attaining in full trading member. When we see the membership seat fee of ECX, 71.4% of the respondents said that very expensive and also 48% of the respondents said the membership requirements of ECX were not encouraging. About 68.5% of the trade participants said that one of the major factor to participate as a full memberships were shortage of capital. Currently ECX are allowing using only spot trading contract. About 67.3% of the respondents assure that ECX can enables to reduce the transaction cost.

About 75.6% of the respondents ECX were good in controlling in dishonest or irresponsible practice by the counterparties, intermediaries or banks and 74% of the respondents said ECX were good in enforcing of the contract. ECX also good in Arbitration mechanism for dispute settlement, 72% of the respondents assure this fact. ECX also good in controlling speculative excess and reducing default risk, majority of the respondents said this one.

5.2 Conclusion

Today, the existing commodity markets are highly globalized and Creates stiff competition among the countries in the international market. So, to win the competition between the countries the organization like ECX, are necessary a detailed understanding of the hindering/ influential factors of ECX. Therefore, the objectives of this research to investigate the challenges of ECX on coffee. To come up a great role for the country economy Commodity exchange markets requires Proper implementation and regulation. To trace such objectives we used systematic random sampling procedure compromising 168 observations. The sample size compromises 168 trade participants.

Descriptive analysis revealed that most respondents fall in the age group of between 31-40 years. Concerning their education, about 73.2 percent of the sample respondents have attained a secondary level. In talking about ECX trade participant, the major occupation of the majority respondents are full time merchant. Regarding with years of participating of the trade participant, significant number (38.7%) of the respondents was starting since 2003.

Practically the exchange is employing open outcry trading system and spot contracts. An important issue in dealing with providing market information by ECX. Results show that about 50.6 % of trade participant has revealed that ECX has providing accurate market information. However, still ECX has poor with respect to providing understandable and seasonal market information to the trade participant.

ECX and the authority was found playing an significant role, in reducing transaction cost, in controlling dishonest or irresponsible practice by counterparties, intermediaries, banks, in enforcing of contracts, constraining speculative excess, arbitration mechanisms for conflict settlements and minimizing default risk. In addition to the above as the finding of the study found has take part in a great contribution with respect to the bank clearing and settlement of the exchange, corresponding up of each buy and sell transaction, creating integrity of the market place.

As a perusal of the overall analysis revealed that, Shortfall of agricultural product, Physical Infrastructure, macroeconomic instability, price fluctuation, lack of adequate warehouses that accommodate ECX participants request; higher penalty cost imposed for the participants for not

withdrawing their commodity from the warehouses, poor quality of warehouse service insufficient time to store and transfer the commodity, in efficient and inadequate in store credit; discouraging the membership requirement of ECX, expensive membership seat fee and exposed for corruption were found to be amongst the fore front challenge/confront to the success of ECX.

5.3 Recommendation:

The results of this finding revealed that it was gaining a promising progress and positive momentum towards achieving its intended goal of ECX. The researcher is forwarding the suggestion for different stakeholders such as: ECX and government.

For ECX

- ❖ Even if, ECX has providing accurate market information. However, it has poor with respect to providing understandable and seasonal market information to the trade participant. So, ECX has taken in to account as an input and should be run to deliver the information in a simple way and on time basis.
- ❖ ECX has also a responsible to build or rent additional adequate warehouse storage and also should be re-visit and charging fair penalty cost for the participants for not withdrawing timely and also almost most of warehouses were located in the regional areas of the countries, the time given to the member participants to store and transfer their commodities are not sufficient. So, ECX should examine the time and give a reasonable time.
- Another important problem was shortfall of agricultural product or losing their weight of crops. Agricultural product like coffee, stored in the warehouse and losses their moisture after a month's. This indirectly costs for ECX. To avoid this problem, as a solution ECX was made a moisture adjustment for agricultural products. However still this problem is not solved. So, ECX should be amending ways of taking a moisture adjustment technique.
- ❖ One of the major constraints of ECX was Quality grading. Because a product like coffee, 60% of quality graded are made by a quality grading specialist. So, it may expose for corruption. To avoid this problem, ECX as the organization to take a corrective action

- and checking the Quality grading specialists should be treating all participants equally /with no partiality and free from corruption. Additionally, try to hold up the system of grading process by full computer technology.
- ❖ Now a day's ECX used spot contracts due to these fact trade members of the ECX were faced a price fluctuation in buying and selling of commodities. So as to minimize the problem point out in the above, ECX should try to start a future contract in addition to that of future contract to reduce price risk. Futures contract market in commodity exchange is largely used as risk management.
- ❖ Even if, theoretically store credit facility are exist for trade participant, however still ECX are poor in warehouse store credit systems. To get adequate liquidity of the exchange it should apply in store credit by all qualified banks of the exchange and should give a higher concern and commitment in effectively and successfully using of warehouse receipt system.
- ❖ Another important problem is membership requirement of ECX and membership seat fee charged by ECX were high. So, ECX should be re-examining the membership and able to encourage the trade participants. Additionally, ECX should be charged a reasonable membership seat fee.
- Try to create an opportunity for Sharing knowledge and best experiences with other countries that has a commodity exchange market.

For The Government

- ❖ The government knows that, ECX has played a great contribution for the economic development of the country. Therefore, the government walk away to solve a problem poor in physical infrastructure. As we know physical infrastructure such as; road, communication technology and power that support commodity exchange in effectively and efficiently
- ❖ The other one is the government should be playing unreserved role to stabilize the macro economy as well as the price.
- ❖ Encouraging the integration of the commodity and financial sectors, by eliminating excessive restrictions on participation by financial institutions in markets and on hold up for market development.

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Annexes

Annex 1: Questionnaire (English version) JimmaUniversity

College of Business and Economics

MSc Program in Accounting and Finance

Questionnaires for Trade Participants of ECX Dear participants:

You are being asked to participate in a survey that intends to assess "Challenges of Commodity Exchange in Ethiopia". The purposes of the study are to: describe commodity exchange practice in Ethiopia, identify the current and future challenges for either the adoption or treatment and recommendation. I respectfully request your kind cooperation in answering the questions that follow as clearly and frankly as possible and your response will be highly confidential.

TekabeSintayehu

Thank you in advance for your kind cooperation

I. Personal Information questions

Please answer by putting a thick $(\sqrt{})$ in one of the blank spaces corresponding to each items.

1.	Age group of the	e respondent
2.	20-30	
4.	31-40 41-50 Above 50	
2. Edu	cational status:	

	1) Illiterate 2) Read	and write	mary	level					
	4) Secondary level	5) Tertiary							
3. N	3. Major occupation: 1.Merchan 2.government employe 3. other,								
	fy			1 , _		_			
1	J								
	r how many years have you bee		ed in ECX?						
1. 20	00 2. 2001 3	3.2002	4. 200	3		5.Above	200	3	
II.	MARKET INFORMATION	AND PH	YSICAL	INFRA	ASTR	UCTUR	E I	RE	LATED
QUE	ESTION								
1	Those are major characteristic	s of market							
	information that ECX have/pro								
	1	J							
			V.goo	d Go	ood	neutral	Poo	or	V.Poor
			, .g		, o u	lioutiui			V 11 001
1.2	Accuracy of markets informat	ion							
1.3	Time lines of markets informa	tion							
1.4	Understandability and easily int	terpret the							
	information displayed by the E0	CX?							
1.5	Technological infrastructure to	deliver the							
	information to the customer								
1.6	Apart from ECX activity, how	do you see							
	like power, telephone network	, internet, roa	ad						
	facility to run your business?								
			I				<u>!</u>		
III D	DICE DEL ATEN OLIESTIO	NC							
111.1	RICE RELATED QUESTIO	IND							
2	The question that are listed	1.Strongly	2.Agree	3.Net	ıtral	4.Disag	ree	5.3	Strongly
	below which is concerned	agree						di	sagree
	to the assurance of the								
	payment selling and buying								
	activity and price								

2.1	ECX provide clearing and
	settlement service in
	satisfactory way to the
	customer
2.2.	Assures payment to seller
2.3	Matching up of each buy
	and sell transaction
2.4	Ways of price
	determination
2.5	Protecting the integrity of
	the market place
3	Do you think that current
	economic condition have an
	impact on Ethiopian
	commodity exchange

4. For question no.3if your answer is 1 or 2 please try to identify the impact macroeconomic	
instability	
	-

IV. WAREIHOUSING AND QUALITY GRADING RELATED QUESTIONS

5	The question which is listed below are	V.good	Good	neutral	Poor/l	V.Poor/lo
	regarding to ECX Warehouse and quality				ow	w
	grading of the products(coffee)					
5.1	How do you rate:					
	The warehouse capacity to hold all requests					
	by ECX participant?					
5.2	The quality of the service of the warehouse?					
5.3	The warehouse storage cost?					

	T		.		T		1	
5.4	How do you evaluate: the penal	lty cost for						
	the delay made to withdraw the	commodity						
	on time from the warehouse?							
5.5	How do you evaluate the time g	given to store						
	and transfer your commodity?							
5.6	How do you evaluate the securi	ty of which						
	protect from causality like theft	and fire?						
7	Regarding with quality	Strongly	Agree	Neutral	1	Disag	Strongly	
		agree				ree	disagree	
	Does the warehouse equipped							
	with grading laboratory?							
6.1	Do you believe that the							
0.2								
	warehouse operates with							
	quality control specialist?							
6.3	The quality grading sampling							
	of products which is free from							
	corruption							
7. To create efficient and effective buying and selling activity in ECX, what it should be improved related to warehouse? 1								
V. L	IQUIDITY RELATED QU	UESTIONS						
8. Fro	om which source did you get cred	lit?						
1. Go	vernment2.Midnce institut	ion 3	B.Ban	4. Iqub		[
5.	Friends or relatives							
9. Ho	w do you describe the credit ava-	ilability if nee	ded?					
1. Ea	asley available2.Availab	ble 3	3.Nuteral. [No	ot Easily a	vailable		

5. Not available
10. How do you get in store credit (warehouse receipt) facility?
1. Very good 2.Good 3. Neutral 4.Poor 5.Very poor
11. Since if you get the credit, how do you describe the interest rate that you pay for the
aforementioned financial institution?
1. Very high 2.High 3.Fair 4. Low 5.Very low
12. Anything you want to improve related to credit?
1
2
VI.TRADING PRACTICES RELATED QUESTIONS
13. In which categories of membership did you participate?
1. Full trading member 2. Full intermediary member
3. Limited trading member 4. Limited intermediary member
14. How do you rate the membership seat fee of the ECX?
1. Very Expensiverap
5. Very Cheap
15. The membership requirement of the ECX is
1. Very Encouraging 2.Encouraging Peutral Discouraging
5. Very Discouraging
16. What are the major factors that affect you in participating full membership of ECX?
1. Limited membership seat2e of capital 3.othson, please Specify the
reason
17. What type of exchange trading contract do you use currently?
1. Organized spot trading
3. Forward contract trading 4. Others, please specify
18. If your answer to question no 17 is organized spot trading, how do you hedge against price
fluctuations and risk?
19. (a) How do you describe Ethiopian Commodity Exchange in terms of transaction costs?

	Reduced transaction cost difference with the traditional tra					
	ners, specify					
	or question No.19 .if your answer				ou think is	s the
	1S			-		
21. Aı	ny problem with related to trading	g activity pleas	e mention?			
VII. R	Regulation question					
22	Do the ECX regulators ensure	Very good	good	neutral	poor	Very Poor
	the following major					
	characteristics of the					
	exchange markets?					
22.1	Dishonest or irresponsible					
	practice by counterparties,					
	intermediaries or banks					
22.2	in enforcing contract					
22.3	Arbitration mechanism for					
	dispute settlement					
22.4	Constrains speculative excess					
22.5	Reducing risk of default to					
	acceptable level					
			problems?			

ጅማ ዩኒቨርሲቲ

ቢዝነስ ና ኢኮኖሚክስኮሌጅ

ውድየኢትዮጵ*ያምርትገ*በያአባላት(ተሳ*ታፊዎ*ች)

የዚህጥናት አጥኚበጅማዩኒቨርሲ ቲበAccounting	g and	Finance	የ ሁስተ ኛዱግሪ(MSc)
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³⁄⁄ሚÁÒØሙችግሮች″በሚልር ሕስበማካ ሄድሳ መስከቱየመጀመርያደረጃመረጃከዋናተሳታፉዎ	-	-	
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ለትብብራችሁበቅድምያአመስግናለሁ!!!!			
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4) ሁስተኛደረጃ 5) ኮሌጅ ና ዩኒቨርስቲ
<i>w</i>) ዋናስራ <i>ዎ</i> ፡
1)ካ.ጋዩ.2 3)የመንግስት
4)አምራች/ገበራ 5)ሴሳ
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4.2003 <i>ዓ.ም</i>
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6.6									
6.7	<u>፡</u> በአጠ <i>ቃ</i> ሳይየምርትናሙናአወ	ሳሰድ							
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VI.የግብይት አስራርን የተመለከተ ጥያቄዎች
13.ሕርስዎየሚሳተፉ-ትበየት-ኛውየአባልነት አይነት ነው
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ስአታችሁንሰውታችሁስለሞላችሁኝበድ*ጋ*ሜአመሰግናለሁ!!!!!!!!!

Annex 2: INTERVIEW QUESTION

I. Members and client manger

1. How many membership categories?

VII.

- **2.** What are the basic challenges of your department?
- **3.** Do you think that your information that broadcast to the customer is easily understandable?
- **4.** Do you think unstable macro economy affect the commodity exchange
- 5. Do you think unstable macro economy affect the commodity exchange
- **6.** Do you think ECX can enable to reduce the problems which are faced by old /traditional agricultural system?

I. Warehouse manager

- 1. What are the basic problems in your department?
- 2. Do you think that your tasks are free from corruption? in which task area mostly raised this issue

- 3. Do you think that your organizations are running in line with the objectives of ECX?
- 4. Do you think ECX can enable to reduce the problems which are faced by old /traditional agricultural system?

II. Quality Grading Specialist

- 1. What are the basic problems in your department?
- **2.** Do you think ECX can enable to reduce the problems which are faced by old /traditional agricultural system?
- **3.** Do you think that your tasks are free from corruption? in which task area mostly raised this issue