ETHIOPIA COMMODITY EXCHANGE—CHALLENGES AND OPPORTUNITIES OF LIQUIDITY

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June, 2008

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A PROJECT PAPER

SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES, ADDIS ABABA UNIVERSITY.

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF BUSINESS ADMINISTRATION
Ethiopia Commodity Exchange—Challenges and Opportunities of Liquidity

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Statement of Certification

This is to certify that Mulugeta Alemayehu has carried out his project work on the topic “Ethiopia Commodity Exchange—Liquidity Challenges and Opportunities” under my supervision. In my opinion, this work qualifies for submission in partial fulfillment of the requirements for the award of Degree of Masters of Business Administration.

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Dr. Mehari Mekonnen (Asst. Professor of Finance and Investment)

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Statement of Declaration

I declare that this project work is my original work. It has not been submitted for any degree/Diploma in any University. I have undertaken it independently with the advice and suggestions of my advisor for the project, Dr. Mehari Mekonnen (Asst.Professor of Finance and Investment). In carrying out of the project work I have different sources and materials, which have been appropriately acknowledged.

Signature _________________________

Mulugeta Alemayehu
Acknowledgement

First and foremost, my gratitude goes to Dr. Mehari Mekonnen who is my research advisor and whose kind and inspirational comment enriched the paper.

Besides, without the extraordinary support of the management and the staff of the Ethiopia Commodity Exchange, this paper would have not been possible. Their honest and gap filling services gave me an insight to consider the realities on the ground. They deserve my sincere appreciation.

Finally, I am indebted to the emotional support of my family and my friends who are too many to list their names.

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ABSTRACT

The Ethiopia Commodity Exchange (ECX), the first organized agricultural market, was established pursuant to Proclamation No. 550/2007 as a wholly owned government institution. The expectation is to revolutionize the existing inefficient agricultural market and thereby to bring about a meaningful contribution to the growth of the whole economy. The research, therefore, attempted to address the liquidity challenges and opportunities that might impede and/or facilitate the effort to realize this fundamental shift in marketing system. The research was mainly conducted through observation and critical evaluation of the ECX’s model vis-à-vis the environment in which it is operating. The result suggested that there are lots of challenges that might slow down the momentum of the change which might result in disruption the effort to accomplish the stakeholders’ expectation. So far, much is left to be desired in terms of designing a strategy to reduce the potential negative impact of the liquidity challenges. In lieu of this, possible solutions intended to be employed as a general road map for specific action plan, are recommended. Despite the foregoing, opportunities are already there to be scrutinized so that their leveraging potential be utilized. In brief, the launching of the ECX is a major breakthrough in Ethiopia’s attempt to modernize the existing agricultural market. But, success depends on how swift the reaction might be to the ongoing realities of the country and the major setbacks ahead.
CHAPTER ONE

INTRODUCTION

1.1 Background

The ECX was established pursuant to Ethiopia Commodity Exchange Proclamation No. 550/2007 as wholly owned government market institution. Its authorized capital is Birr 250 million with paid up capital of Birr 90 million. Subsequently, the Ethiopian Commodity Exchange Authority was established by Proclamation No. 551/2007, as a governing organization. The Ministry of Agriculture and Rural Development is the supervising authority of the ECX. The structure is similar to model of the Commercial Bank of Ethiopia in which the Bank governed by the National Bank of Ethiopia while supervised by the Public Financial Enterprises Authority.

After about 14 months of study and preparation, the inauguration of the ECX was announced at the National Forum conducted at the conference room of Economic Commission for Africa on the 4th and 5th of April, 2008. The inaugural ceremony was made by the opening speech of the Prime Minster.

The ECX was designed to start operation at the spot market (physical delivery) with four commodities namely Sesame, Pea Bean, Wheat and Maize. But it intended to trade Teff and Coffee in the near future. The mode of trading is an open out cry system at its Trading Pit.

1.2 Statement of the Problem

The ECX is believed to provide market integrity, efficiency, transparency, and risk management and thereby revolutionize the agricultural market. However, to live up to its expectations, identifying
the opportunities and challenges of liquidity and designing a proactive risk management system is an absolute necessity. Liquidity of the ECX’s traded commodities is essentially determined by how the market participants perceive it as an efficient and reliable trading platform as compared to the other physical markets such as “Ehil Bernda”. Thus, if the perception is negative, it will be detrimental to attracting the required liquidity. Then, the role of the ECX as a platform for efficient price discovery will be quite limited if not impossible without adequate liquidity. In the extreme scenario, the continuation of the exchange as a going entity will be at stake since it tantamount to a continuous investment without driving any return.

1.3 Objectives of the study

In view of the inseparability of liquidity from the growth and survival of the ECX, the study will identify the liquidity challenges and opportunities based on which possible solutions will be recommended.

1.4 Significance of the Study

The study will serve as a reference material for:

- Academicians and practitioners;
- ECX to revisit its existing model in terms of creating liquidity; and
- Interested researchers to carry out more extensive studies in the area.
1.5 Methodology

Much of the current research conducted on commodity exchange tends to emphasis on its economic importance. Adequate literatures on liquidity and its impact on the viability of exchanges are difficult to find. This, however, does not imply that liquidity is not an issue for commodity exchanges. Rather, the very existence of an exchange is linked to the availability of liquidity. Presumably, the major focus of successful exchanges is on service enhancement and innovation since they already reached to the stage where deliberating on liquidity issues is no more a priority.

On the other hand, the absence of historic data at this initial stage of the ECX indicates that the suitable method for this research project is critical observation of its model in terms of the environment in which it is operating. The buyers and the sellers (members) will participate at its trading Pit with the sense of confidence and trust when its design takes into account the realities of the country and ongoing monitoring is made towards its implementation. Thus, emphasis is being made at the model of the ECX and the context in which it operates. In this regard, the rules and the regulations, the various brochures, weekly newsletters, pronouncements of the ECX are collected and critically evaluated against the related conceptual frameworks discussed in the literature review.

To substantiate the findings, physical observation were made during the members as well as staff meetings and issues raised are narrated as reported. Then, the implications to liquidity as understood by the researcher are indicated. In addition to reviewing the various documents, the summaries of six weekly trades (24th of April, 2008 up to the 4th of June, 2008) are critically analyzed and the implications to liquidity are assessed. In view of these, my research tends to be descriptive.
1.6 Limitation of the Study

As has been described in the methodology section, adequate literatures on liquidity and its impact to the viability of exchanges are difficult to find. Thus, quantitative liquidity indicators such as volume of trade and open interest of other exchanges are not included in the literature review.

1.7 Organization of the Study

The study is organized under four chapters. Background information, statement of the problem, objectives, significance of the study, the methodology used to conduct the study, and limitations of the study are included in the introductory part. The second chapter deals with review of literature. The third chapter presents the empirical findings while the fourth chapter provides conclusions and recommendations.
CHAPTER TWO
REVIEW OF LITERATURE

2.1 Overview

A commodity exchange in its narrowest sense is a central place where sellers and buyers meet to transact in an organized fashion, with certain clearly specified and transparent “rules of the game” (Gabre-Madhin and Goggin, 2005). The authors further defined that a commodity exchange in its wider sense, is any organized market place where trade, with or without the physical commodities, is funneled through a single mechanism, allowing for maximum effective competition among buyers and among sellers (p.7).

Gabere-Medhin (2001) in an attempt to highlight the main derivers of the exchange in Ethiopia indicated that the absence of a public market information system coupled with the physical distance between regional traders and central market brokers resulted in high monitoring costs for traders to monitor broker’s actions. Moreover, lack of grain standardization, the oral nature of contracts, and limited legal enforcement of contracts are all factors that contribute to the difficulty that traders encounter in attempting to trade directly with unknown partners (p. 44). These services can be provided by commodity exchanges in an equitable manner: they level the playing field between big and small, powerful and oppressed (Multi Commodity Exchange of India’s, 2007). This is substantiated by the fact that, many physical markets start once Multi Commodity Exchange of India starts trading, as everyone wishes to know current market conditions (p.15).

An exchange provides a great service to the market and the wider economy when the volumes of trade on the exchange are sufficiently large to justify that price discovery according to true market fundamentals (Gabre-Madhin and Goggin 2005, p.21). This fact alone is a compelling reason to justify an exchange.
The existence of a vibrant, active, transparent, and liquid commodity market is normally considered as a healthy sign of development of a country’s economy (Multi Commodity Exchange of India, 2007, p.34). Commodity exchanges can fill the institutional gap left overly by hasty liberalization and provide three basic functions: price transparency (everyone has access to a neutral reference price); price discovery (demand and supply developments are easily reflected in price levels); and reduced transaction costs as it is easier to find buyers or suppliers through a centralized market place (UNCTAD, 2007).

However, UNCTAD (2007, p.18) argued that an exchange is only one part of a policy framework – it is not a panacea and it does not stand alone from other commodity policy interventions. Besides, an exchange which is badly-structured or poorly-managed is unlikely to deliver enhancements to underlying commodity sectors. Hence, the oversight and enabling role of the government is necessary. In its oversight role, the government ensures discipline by controlling those who try to manipulate the market and assures the sanctity of contracts. Besides, in its enabling role it applies appropriate legal and regulatory framework. It also provides missing elements of the physical infrastructure and signaling support for fair and transparent market operations.

The foregoing discussion highlights that an exchange can play an important economic role by creating an equal playing filed and thus enhancing efficiency of the markets. This conclusion, however presumes that the structure of an exchange is properly designed and adequate monitoring is being made to attract adequate demand and supply.
2.2 Commodity Exchange in Africa

As per the report of UNCTAD (2006), the South African Futures Exchange (SAFEX) informally launched in 1987 evolved as a leading emerging market. While for a long time the South African Futures Exchange only traded financial futures and gold futures, the creation of the Agricultural Markets Division led to the introduction of a range of agricultural futures contracts for commodities of which trade was liberalized, namely, white and yellow maize, bread milling wheat and sunflower seeds.

In terms of volume, the SAFEX trades an average of 100,000 tones of product daily, including white and yellow maize, bread milling wheat, sunflower seeds and more recently Soya beans (UNCTAD, 2006, p.25).

The Kenya Agricultural Commodity Exchange (KACE) was set up in 1994 to trade agricultural commodities like cereals, dairy products and cotton. However, faced with fragmented markets, government intervention and significant infrastructural deficiencies, trade has always been minimal (www.unctad.org/TEMPLATES/Download.asp?docid=7942&lang=1&intItemID=402–retrieved on 09-04-08).

Kenya on April 21, 2008 launched a new agricultural commodities market that will see farmers instantly realize the value of their produce and free them from the grips of exploitative middlemen. The main challenges however remain the quality of the produce that farmers deliver and the reality that most are small scale and find it difficult to deliver in bulk which is ideal for an exchange. 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 are also challenges need to be addressed.


The Abuja Stock Exchange which was re-incorporated as the Abuja Securities and Commodity Exchange (ASCE) in 2003 is configured to help develop the largely unorganized but potentially lucrative Nigerian commodity-trading sector through the establishment of a platform that would stimulate effective and efficient price discovery and transparency for operators. To function effectively, the ASCE will need the following infrastructure (www.fissecuritiesltd.com/downloads/abuja_sec.pdf retrieved on 22-04-08).

(i) A technical partner for knowledge transfer and capacity building.

(ii) A commodity trading software that will drive commodity trading activities at the Exchange.

(iii) Set of rules and regulations to guide its day to day operations and a forward market commission to regulate the activities of commodity exchanges & futures markets.

(iv) Registered independent Bonded warehouses that could store Commodities and issue negotiable warehouse receipts that could be traded on the Commodity Exchange.

(v) A Collateral Management Company to intermediate between the collateral taker (usually a Bank) and the farmer who will pledge his stock of Commodity stored in a bonded warehouse as collateral to secure credit finance.

(vi) An organized Spot Market, that would provide benchmark spot prices of commodities whose futures contract are quoted for daily trading, on the futures market.
The Zambia Agricultural Commodity Exchange (ACE) and the Zimbabwe Agricultural Commodity Exchange (ZIMACE) launched in the mid 1990s subsequent to agricultural market liberalization, have both failed because of government interventions in their core maize markets. Three different initiatives in Ghana never found sufficient business support. In Egypt, discussion on the reintroduction of the Alexandria Cotton Exchange, abolished by the Government in the 1950s, is revived from time to time. In Cote d'Ivoire, there is a "Bourse" for cocoa and coffee but it has so far not managed to develop any real business (www.unctad.org/TEMPLATES/Download.asp?docid=7942&lang=1&intItemID=4029 – retrieved on 09-04-08).

In short, some of the underlying issues facing the individual countries attempting to establish exchanges have been the weak liquidity in national markets that make it difficult for the exchange to be financially viable and the lack of necessary infrastructure and key support institutions for efficient trade. Thus, exchanges have had difficulty providing services of real value to users. With important technological progress in Information Communication Technology as well as in exchange software packages, it may be possible to leapfrog the traditional western model and circumvent the above constraints.
2.3 Liquidity of Exchanges

In addition to market risk, agriculture is highly subject to production risk because agriculture depends on natural processes, such as weather, disease, pests, and the confluence of human effort, technology, and nature (Task Force on Ethiopian Commodity Exchange Development, 2006). Supply theory in economics holds that the higher the price of a commodity, the greater its supply. However, agricultural products suffer from supply price inelasticity, where an increase in price does not translate to increase in supply, as production is subject to seasonal fluctuations and vagaries of weather (www.fissecuritiesltd.comdownloadablesabuja_sec.pdf retrieved on 22-04-08).

The persistence of “thin” markets 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 (Ethiopian Development Research Institute, 2005). Major constraints can be identified as either linked to weak infrastructure or to missing institutions. In terms of infrastructure, major concerns are the weak access of smallholder farmers to roads, as well as limited telecommunications and storage infrastructure. 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 (p.23). To do so requires that the market operates 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 (p.26).

Among the three major players in the derivatives market—hedgers, speculators and arbitragers, speculators have the capacity to absorb buying/selling by hedgers (Manish and Navneet, 2007). Johannesburg Securities Exchange (2005) indicated that the speculator in a
market often gets the blame for the extreme volatility. However, the speculator provides liquidity to the market ensuring there is a willing counterparty to take the risk. For a trade to be executed there has to be a willing buyer and willing seller, as often when prices are extremely high there are limited millers who want to buy, however speculators may see an opportunity that the market may trade higher and be willing to trade with a producer (p.7). This therefore provides an opportunity for the producer to hedge. Besides, without liquidity it is difficult to determine whether a fair price is being quoted, if indeed one is quoted at all (Doyell et al, 2007).

In trying to address the measure of success of a derivative product liquidity is considered to be the only true test for the success of a derivative product (Manish and Navneet, 2007, p.87). As liquidity is a function of the interest of market participant’s in a product, the most important success factor for a contract therefore, is that it must appeal to a large set of market participants. They further pointed that a right contact size is another important requirement for the success of a derivative contract in the sense that to attract a large set of market participants the contract size should not be too big or too small (p.88).

According to Patil & Golaka (2006), the existence of a well-laid regulatory framework is an important requisite for the success of the contract as it engenders confidence among market players by the creation of an equal, fair, competitive and efficient market place. i.e., it can improve the liquidity of the market. They indicated that liquidity is generally measured by number of trades of marketable lots, trading volume, impact cost, etc (p.23).
Goggin (2007) argued that in order to survive by attracting the required liquidity, agricultural commodity exchanges need to provide new and innovative services to the market, services such as:

- Silo/Warehouse Receipts
- Risk Mitigation
  - Buyer deposit (Letter of Credit facility)
  - Margin deposit (performance bond facility)
  - Collateral Management
- Courier Service
- Regional documentation to be incorporated into the information base.

To attract the required liquidity, creating awareness and imparting knowledge about the trading techniques to potential market players is of paramount importance. But, it is feasible only in relatively medium term and long term time frame. Besides, after receiving such training, they may take a thrust in the commodity market only if these markets have sufficient breadth and depth and provide relatively inexpensive exit route. To some extent, the resistance to change could be attributed to the governance structure of the existing Exchanges. Changing the governance structure of the existing Exchanges is not as easy as setting up a new Exchange with appropriate professional governance structure. The transition without bloodshed will therefore have to be evolutionary rather than revolutionary. In the absence of initial critical liquidity —, which is necessary for least cost exit, even potential new players are also sitting on the fence. (www.igidr.ac.in/~susant/DERBOOK/PAPERS/dsk_draft1.pdf retrieved on 14—04-08).

Moreover, enhancing the scope, efficiency and transparency of the commodity markets is required in order to enhance participation and bring liquidity. Some of the key issues that will
need to be addressed relate to (a) putting in place appropriate and efficient market structures such as a demutualised exchange, nation-wide automated trading system, (b) work to strengthen related market structures such as spot market and information dissemination, quality standards and assurances, certified warehouses and (c) work towards replacing physical settlements with warehouse receipts based settlement systems. Many of these are outside the purview of an exchange and require significant changes in infrastructure and legal framework. However even with many of the elements put in place there is still no assurance that an exchange will be able to attract liquidity (www.iief.com/Research/CHAP7.PDF retrieved on 12-04-08).

Multi Commodity Exchange of India (2007, p.36) indicated that before the advent of nationwide, online, multi-commodity exchanges, the low volumes in the regional exchanges in India were attributed to the following reasons:

- Excessive government intervention in the form of subsidies, price control, compulsory purchasing, and rationing in the agricultural markets. This led to inefficient functioning of the markets and lower yield in terms of income to the farmers.
- Influential and large commodity producers/traders acting as members/brokers of commodity exchanges and manipulation in the prices of commodities.
- Imperfect mechanisms and lack of standardization for physical delivery, settlement, documentation and warehouse arrangements.
- Absence of organized interconnected spot markets, which resulted in flawed price discovery mechanisms and no means to arbitrage to achieve price efficiency in geographically separated markets.

The major risks in commodity exchange are poorly formulated contracts that do not meet customer requirements and insufficient volumes of trade (Goggin, 2007, p.36). If liquidity in

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the markets were to be reduced and investors found it difficult to liquidate a large position, firms would also have to carry additional legal risk, as payments and settlements could slow down and the value of positions could become uncertain (Financial Services Authority, 2006). Considerable time is needed to sell assets with low market liquidity in large quantities without having a large negative impact on market prices (Bank of Japan, 2005).

The lack of sufficient market depth results in relatively high hedging costs, and inhibits the growth of futures contract volume. India is a clear example of the presence of a sufficiently large domestic physical market playing a critical role in successful launching of a local exchange and its contracts. The contracts would not have been necessary in the first place without the large physical market, nor would they have been able to attract much liquidity without it (www.farmdoc.uiuc.edu/nccc134/pdf/NCR-134%202003%20Meeting%20Brochure.pdf retrieved on 12-04-08).

Why some markets provide more or less liquidity lies in the fact that trading is, in part, a coordination game. In general, traders are better off going to the same “place” in order trade as this maximizes their chance of finding a counter party. Thus, a market may fail simply because we all believe it will. Explaining why some asset markets are more liquid than others is not an easy task. Our current theories all have problems with one pattern or another. Perhaps there is no “single” answer. Still, it would be helpful to have an overarching set of principles that supplied predictions at least roughly consistent with the market data we have (Finance Research Letters, 2008).

In a nut shell, a successful commodity exchange provides transactions for its participants—farmers, processors, traders, large consumers, food aid agencies, and others—in a low-cost fashion. The lowering of costs benefits the market actors who can enjoy a higher share of the
final price. This in turn generates incentives for increased market volume, and provides an incentive for increased participation in the market. Thus the success of exchanges is directly linked with the ability to provide services efficiently which induces the required demand and supply.

2.4 Liquidity of Exchanges in Africa

With the exception of SAFEX in South Africa, Africa has been the region with the least success in developing its commodities exchanges. Exchanges in Zimbabwe and Zambia have failed because of changes in government policy. Others in Nigeria and Kenya have also struggled to establish themselves as significant entities for facilitating price discovery and risk transfer. However, the Pan-African Commodities and Derivatives Exchange, with a hub and spoke model built upon a common technological platform, offers greater promise in overcoming the cost and liquidity hurdles that African exchanges have historically encountered (www.unctad.org/en/docs/ditcom20058_en.pdf retrieved on 10-04-08). Gravelet (2007) argued that the difficulty in ensuring liquidity in Africa lies in the large infrastructure that is needed to establish commodity markets, for example, storing the products, as well as the underlying political and economic infrastructure.

Because of the region’s size and diversity, it is difficult to categorize all the reasons for the slow and painstaking process of establishing commodity exchanges in Africa, but several general factors can be cited (ftp://ftp.fao.org/docrep/fao/meeting/011/J9311E.pdf retrieved on 14-04-08).

- Market fragmentation – regionalism, state policy, crop varieties, asymmetrical pricing, deficient price dissemination.
There are several reasons why implementation of a commodity exchange in Africa is more difficult than in Asia, CIS, Eastern Europe or Latin America. A commodity exchange can be a tool for regional economic integration, making it much easier to trade commodities across borders. But with traditional exchange models, the necessary liquidity to make an exchange financially viable can only be reached if the market is already large enough. With the exceptions of Nigeria, South Africa and some of the North African countries, national commodity markets in Africa are rather small, and there is little formal intra-regional trade. Furthermore, commodity markets, many of which were until recently dominated by government-controlled marketing bodies, lack many of the key support institutions for efficient trade (www.ifsc.co.bw/docs/speech_UNCTAD.pdf retrieved on 10-04-08).

In short, it can be observed that Africa is the weakest region in terms of exchange development. Efforts to start up exchanges have experienced a start-and-stall pattern, largely due to policy reversals or excessive government intervention or to inappropriate business models to begin with. The Kenya and Malawi earlier efforts have had flawed business models, relying on external donor support, rather than streamlined low-cost alternatives.

2.5 Exchange Model
In terms of general structure, commodity trading is often categorized into spot, forward and futures trade. Some exchanges start with the first one and develop to the other while others commence operations with the last mode (www.fissecuritiesltd.com/downloadablesabuja_sec.pdf retrieved on 22-04-08).

On the other hand, Alexis (2007) argued that experience should be gained in the development of the spot exchange before commencing a futures market to explain the point that when the rules and operating systems become customary and the traders exhibit confidence in the system, then it would be time to look into the feasibility of developing futures market. UNTACD, (2007) reinforced the importance of commodity exchanges offering spot trade as a conduit for linking participants in the physical markets with trading partners. i.e., by concentrating trade in one place, the exchange reduces transaction costs as buyers and sellers benefit from savings in time and resources that would otherwise have been incurred in the search for a suitable counterparty.

Unlike the Asian exchanges which have quickly evolved into futures trading, some of the newly established exchanges in the transition economies of Eastern Europe have focused mainly on spot and forward contracts for commodities, such as those in the Czech Republic, Slovakia, Yugoslavia, Bulgaria, and Uzbekistan. Others, such as in Poland, Hungary, and Slovenia, have focused on domestically oriented futures trading. These exchanges have not witnessed significant evolution over the 1990s and early 2000s and the Budapest Commodity Exchange is likely the strongest (National Task Force on Ethiopian Commodity Exchange Development, 2006, p. 38).

Thus, it can be inferred that there is no blueprint for commodity exchange development. They are useful and viable only when tailored to the real needs of the country. Commodity
Exchanges should not be considered status symbols, or copied from other contexts, which have a high failure rate (Gabre-Madhin and Goggin 2005, p. 14).

CHAPTER THREE

EMPIRICAL ANALYSIS
3.1 Background

As can be learned from the report of the Task Force on Ethiopia Commodity Exchange Development (2006)\(^1\); experts from Ministry of Agriculture and Rural Development, Quality and Standards Authority of Ethiopia, Ethiopian Grain Trade Enterprise, and International Food Policy Research were established in January 2006 by the Minister of Agriculture and Rural Development to make an assessment on how commodity exchange be implemented in Ethiopia.

To introduce a balanced view of ideas by considering major stakeholders, private sector representatives from Addis Ababa Grain Traders Association, Oilseeds and Pulses Exporters Association, Oromia Private Commercial Farmers Association, Ethiopian Coffee Exporters Association and Awash International Bank joined the Task Force in April 2006.

The task force produced a report in February 2006 that made an assessment of the Ethiopian agricultural market development efforts, including achievements and gaps, and provided recommendations for moving forward in improving market performance.

The fundamental premise of establishing ECX is, therefore, the existing agricultural markets are inefficient as evidenced by high transacting costs and high risk of transacting. Thus, many buyers and sellers are expected to come to trade together when quality, delivery and payment are guaranteed.

Assessment of the various brochures and documents of the ECX denoted that the following are considered the major opportunities of developing commodity market in Ethiopia.

- Ethiopia is the third populous country in Africa;

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\(^1\) commodity/ties as used in this research means agricultural commodity/ties
• Ethiopia is the second largest maize producer in Africa;
• The annual cereal production in Ethiopia is 14 million tons surpassing that of South Africa by 3 million tons in recent years. It is South Africa where the only viable African Commodity Exchange exists;
• Domestic market has the potential to grow together with the growth in the overall economy; and
• Local aid food procurement is also expected to grow.

On the other hand, the process of ensuring commodities deposited in the ECX’s warehouse are good quality and the current situation of sharply rising domestic and global food prices are considered by it as major challenges.

3.2 Observation of the Six Trades

The trade launch of the ECX was held on Thursday, the 24th of April 2008. Three days before the trade launch (21st of April, 2008), a meeting was conducted with the members at the Trading Pit of the ECX. Some of the major issues addressed at the meeting were as follows:

• The Chief Executive Officer of the ECX indicated that the fumigation and/or further processing of rejected commodities is beyond its mandate and thus it will not engage itself in such activities. Commodities might be frequently rejected due to failure to meet the standards of the ECX having a potential of de-motivating depositors in bringing their commodities to its warehouse as the cost of transporting, loading and unloading and searching any other warehouse is high.

• The members emphasized that the use of various communication media for properly informing the public what the ECX does and what it does not is of paramount importance to attract demand and supply (liquidity). Without clear information and communication to the general public about the activities of the ECX, there will be a
high probability that it will be misunderstood. Such misperception may have its own negative repercussion on the interest of potential members to come and trade on the ECX’s Pit. Moreover, some may perceive it as a price stabilization scheme.

- The standard of the bags used for ECX trading was discussed in detail. The members suggested that if the quality of the bags is not specified, it will directly affect the quality of the commodities which may also negatively affect the demand for such commodities.

- The members raised their concern to what extent are the Banks prepared as a major actors in the clearing and settlement process. Some even asked that if they change their mind in the bid to buy, what will be the process to withdraw the money deposited in their pay-in account. They also expressed their concern that if the process is long and inefficient, it will de-motivate them in trading at the ECX’s pit.

Overall, the major issue under detailed discussion was whether planning to launch the trade on the 24th of April, 2008 is justified or not. Lots of arguments for and against were forwarded the central theme of the debate being the supply might not be sufficient enough to start trade.

With the foregoing objectives and expectations, the trade launch of the ECX was held on the 24th of April, 2008.

State Minister of Finance and Economic Development who is also the Board Chairman of the ECX made the opening speech. The central point of his speech was that the ECX is believed to render independent and transparent services to the society and thus will transform the agricultural sector. The Director General of the Ethiopian Commodity Exchange Authority
on his behalf reinforced the previous speech by pinpointing that the establishment of the ECX will play a major role in the growth of the economy. The speech delivered by both speakers suggested that the ECX will attract sufficient liquidity to serve the purpose it is established.

The Minister marked the start of a trading session by ringing the trade bell. The members and/or their floor representatives entered the trading pit after verifying the amount of money that was available in their accounts in the case of buyers and the grade/type/quantity of commodity they had available in the warehouse in the case of sellers.

The first commodity traded for the trading session was White Maize Grade 1. During the session, there were eight buyers and one seller. When the first trade was executed and when the buyers and seller filled the order ticket, there was a pause of bids and offers as there was only one seller. Since it was the first trade, the opening price (reference price) was not given and it was left for the market. For the summary of the trade, please refer table one.

<table>
<thead>
<tr>
<th>Commodity type</th>
<th>Opening price 100kg</th>
<th>Closing price 100kg</th>
<th>High executed</th>
<th>Low executed</th>
<th>volume (in)</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-04-08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table one
Summary of trades
24-04-08
Price in Birr

2 The opening price in this context is the first executed price.
### Price Table

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Highest Offer</th>
<th>Lowest Bid</th>
<th>Exected Price</th>
<th>Volume (Quintals)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Maize Grade 1</td>
<td>334</td>
<td>300</td>
<td>325</td>
<td>1850</td>
<td>The highest offer was Birr 340 and the lowest bid was Birr 300</td>
</tr>
<tr>
<td>Processed White Pea Bean Grade 1</td>
<td>560</td>
<td>450</td>
<td>560</td>
<td>200</td>
<td>The highest offer was Birr 570 and the lowest bid was Birr 450</td>
</tr>
</tbody>
</table>

Source: ECX information desk and personal computation

As depicted in the table herein above, the highest offer price for White Maize Grade 1 exceeds the highest executed price by a margin of Birr 5 while the lowest executed price exceeds the lowest bid price by a margin of Birr 25 suggesting that the bargaining power of the seller was strong.

Similar analysis of the Processed White Pea Bean Grade 1 market suggested the same conclusion. The lowest bid deviates from the executed price by Birr 110 since the demand was in excess of the supply and the bargaining power of the buyers was weak. However, taking into account the first day of trade conclusive analysis could not be made.

The second trading day was held on the 30th of April, 2008 following the management’s decision to make the trade every week instead of its policy of making it daily until sufficient liquidity is ensured. Thus, the management’s decision is a clear indication of liquidity problem though it was not planned in advance. The same commodities traded during the first day of trade were traded during the second day of trade. Though the volume of trade

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3 The closing price in this context is the last executed price
increases in the case of Processed White Pea Bean Grade 1 by 4 contracts (200 quintals), a
decrease was registered in the case of White Maize Grade 1 by 11 contacts (550 quintals). For
the summary of the trade, please refer table two.

Table two

Summary of trade

30-04-08

Price in Birr

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Opening</th>
<th>Closing</th>
<th>High</th>
<th>Low</th>
<th>volume (in)</th>
<th>Remark</th>
</tr>
</thead>
</table>

ETHIOPIA COMMODITY EXCHANGE—CHALLENGES AND OPPRTUINITIES OF LIQUIDITY

24
<table>
<thead>
<tr>
<th>Commodity type</th>
<th>Opening price/100kg</th>
<th>Closing price/100kg</th>
<th>High price</th>
<th>Low price</th>
<th>Volume Quintals</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Maize Grade 1</td>
<td>340</td>
<td>341</td>
<td>341</td>
<td>340</td>
<td>1300</td>
<td>The highest offer was Birr 350 and the lowest bid was Birr 330</td>
</tr>
<tr>
<td>Processed White pea bean Grade 1</td>
<td>575</td>
<td>578</td>
<td>578</td>
<td>574</td>
<td>400</td>
<td>The highest offer was Birr 585 and the lowest bid was Birr 540</td>
</tr>
</tbody>
</table>

Source: ECX information desk and personal computation.

The third trading day was held on the 7th of April, 2008. In addition to the previously traded commodities, new commodity namely Soft Wheat Grade 3 was added to the trading pit. While the volume of trade still decreased from the second trading day in the case of White Maize Grade 1 by 16 contracts (800 quintals) due to shortage of supply, the volume of Processed White Pea Bean Grade 1 remained constant. For the summary of the trade, please refer table 3.

Table three

Summary of trades

07-05-08

Price in Birr
The fourth day of trade was conducted on Wednesday, the 14th of May, 2008. Trading was conducted with White Maize Grade 1 and Soft Wheat Grade 3. The price limit (the maximum amount fixed by the ECX that prices are permitted to rise and fail) was implemented for the first time. Thus, price limit was set 2% and 3% for White Maize Grade 1 and Soft Wheat Grade 3 respectively considering the closing price of May 7, 2008. Accordingly, the price range for White Maize Grade 1 and Soft Wheat Grade 3 was from Birr 387 to Birr 403 and Birr 517 to Birr 549 respectively. For the summary of the trade, please refer table 4.

<table>
<thead>
<tr>
<th>Commodity Type</th>
<th>Opening Price / Closing Price</th>
<th>High Executed Price</th>
<th>Low Executed Price</th>
<th>Volume (in Quintals)</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Maize Grade 1</td>
<td>390 / 395</td>
<td>395</td>
<td>390</td>
<td>500</td>
<td>The highest offer is 420 and the lowest bid is 340</td>
</tr>
<tr>
<td>Processed White Pea bean Grade 1</td>
<td>582 / 582</td>
<td>582</td>
<td>582</td>
<td>400</td>
<td>The highest offer is 592 and the lowest bid is 520</td>
</tr>
<tr>
<td>Soft Wheat Grade 3</td>
<td>526 / 533</td>
<td>533</td>
<td>526</td>
<td>200</td>
<td>The highest offer is 555 and the lowest bid is 490</td>
</tr>
</tbody>
</table>

Source: ECX information desk and personal computation

The fourth day of trade was conducted on Wednesday, the 14th of May, 2008. Trading was conducted with White Maize Grade 1 and Soft Wheat Grade 3. The price limit (the maximum amount fixed by the ECX that prices are permitted to rise and fall) was implemented for the first time. Thus, price limit was set 2% and 3% for White Maize Grade 1 and Soft Wheat Grade 3 respectively considering the closing price of May 7, 2008. Accordingly, the price range for White Maize Grade 1 and Soft Wheat Grade 3 was from Birr 387 to Birr 403 and Birr 517 to Birr 549 respectively. For the summary of the trade, please refer table 4.
<table>
<thead>
<tr>
<th></th>
<th>100kg</th>
<th>100kg</th>
<th>price</th>
<th>price</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>White Maize</td>
<td>403</td>
<td>403</td>
<td>403</td>
<td>403</td>
<td>1,700</td>
</tr>
<tr>
<td>Grade 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft Wheat</td>
<td>549</td>
<td>549</td>
<td>549</td>
<td>549</td>
<td>250</td>
</tr>
<tr>
<td>Grade 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The highest offer is 403 and the lowest bid is 403

Source: ECX information desk and personal computation

Careful observation of the above table reveals the following:

- The opening price, closing price, the daily high, the daily low, the highest offer and the highest bid are equal and took place at limit up suggesting that the price limit was artificial. This was happened due to the fact that the base price, upon which the price limit was set, was one week old (7th of May, 2008). During that period the price at the other physical markets throughout the country were staggering at record high.

- Thus, such very low price filter which was decided presumably to deter the inflation but it could be counterproductive especially in terms of creating liquidity. Sellers could be discouraged to deposit their commodities because the price at other physical markets such as ‘‘Ehil Bernda’’ were much more attractive. For instance, the average price of Maize and Wheat at ‘‘Ehil Bernda’’ one day before trade was Birr 413/ Quintal and Birr 590/ Quintal respectively.

- There were only one seller for wheat and two sellers for Maize. Because of this, the buyers were going for grabbing the sellers hand even without biding any price (the highest price in the range was already assumed) as the seller comes to the center of the pit again reinforcing the assertion that the price limit was artificial.
Therefore, the trade conducted on Wednesday, the 14th of May, 2008 is an early warning signal to the ECX that any attempt to artificially create price limit will damage its liquidity by discouraging potential sellers. In short, the trade conducted on the 14th of May, 2008 indicates that the ECX needs to address the problem with top priority. It should make it clear to all stakeholders that its purpose is not price stabilization. Its purpose is to create the platform for authentic price discovery certainly with overseeing prudent trade practices.

The fifth day of trade was conducted on Wednesday, the 21st of May, 2008. The commodities available for trade were White Maize Grade 1, Soft Wheat Grade 3 and White Processed Pea Beans. The price limit was implemented for the second time. Thus, considering the closing price of May 14, 2008; price limit was set 2% and 3% for White Maize Grade 1 and Soft Wheat Grade 3 respectively. On the other hand, closing price of May 7, 2008 was set for White Processed Pea Beans with 5% price limit. Accordingly, the price range per quintal for White Maize Grade 1, Soft Wheat Grade 3 and White Processed Pea Beans was from Birr 394 to Birr 412, Birr 532 to Birr 566 and Birr 552 to Birr 612 respectively. For the summary of the trade, please refer table 5.

### Table five
**Summary of trades**

21-05-08

**Price in Birr**

<table>
<thead>
<tr>
<th>Commodity type</th>
<th>Opening price / 100kg</th>
<th>Closing price/ 100kg</th>
<th>High executed price</th>
<th>Low executed price</th>
<th>volume (in Quintals)</th>
<th>Remark</th>
</tr>
</thead>
</table>

*ETHIOPIA COMMODITY EXCHANGE—CHALLENGES AND OPPRTUNITIES OF LIQUIDITY*
White Maize Grade 1

<table>
<thead>
<tr>
<th>Grade 1</th>
<th>410</th>
<th>412</th>
<th>412</th>
<th>410</th>
<th>900</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The highest offer is 412 and the lowest bid is 410

Soft Wheat Grade 3

<table>
<thead>
<tr>
<th>Grade 3</th>
<th>555</th>
<th>563</th>
<th>565</th>
<th>555</th>
<th>250</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The highest offer is 566 and the lowest bid is 555

White Processed Pea Beans

<table>
<thead>
<tr>
<th>Pea Beans</th>
<th>No trade was Executed. But the highest bid was Birr 575 and the lowest offer was Birr 580</th>
</tr>
</thead>
</table>

Source: ECX information desk and personal computation

Careful observation of the above table reveals the following:

- The highest executed price for White Maize Grade 1 indicates that the upper limit was reached. Besides, the lowest executed price was approaching the higher limit. Further analysis of the trade indicated that only 4 contracts (22%) of the total 18 contracts were sold at Birr 410 and the seller was a government organization which may attempt to stabilize the market. Thus, it can be said that the price limit was artificial.

- On the other hand, the highest executed price for Soft Wheat Grade 3 indicated that the upper price limit was reached. But the lowest executed price was significantly less than the upper limit due to the fact that the seller wrongly offered Birr 555 while his intention was to offer Birr 565. The seller lost Birr 8/ quintal even if the closing price is considered. Critical observation of this fact suggested that the ECX did not clearly stipulate how the deal is to be handled when errors of such sort happen. This may reward some members at the expense of the error made by their counterpart.

- No trade was executed for White Processed Pea Beans because the seller did not want to execute the trade. This might be explained by the fact that outdated closing price was taken to set the price limit set (the closing price of May 7, 2008).
The sixth day of trade was conducted on the 4th of June, 2008. The commodities available for trade were White Maize Grade 1, Soft Wheat Grade 3 and White Pea Beans Grade1. The price limit was implemented for the third consecutive time. Accordingly, the price limit for White Maize Grade 1 and Soft Wheat Grade 3 were 2% and 10% respectively from the closing price of May 21st, 2008. On the other hand, the price limit for White Pea Beans Grade1 was 5% of the closing price of May 7th, 2008. Thus, the price range for White Maize Grade 1, Soft Wheat Grade 3 and White Pea Beans Grade1 were from Birr404 to Birr 420, Birr 507 to Birr 619, and Birr 553 to Birr 611 respectively. For the summary of the trade please refer table six.

Table six

Summary of trades

04-06-08

Price in Birr

<table>
<thead>
<tr>
<th>Commodity type</th>
<th>Opening price / Closing price</th>
<th>High executed</th>
<th>Low executed</th>
<th>volume (in Quintals)</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100kg</td>
<td>100kg</td>
<td>price</td>
<td>price</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>-------</td>
<td>-------</td>
<td>--------</td>
<td>--------</td>
<td>----------------------</td>
</tr>
<tr>
<td>White Maize Grade 1</td>
<td>415</td>
<td>420</td>
<td>420</td>
<td>415</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>One seller and four buyers</td>
</tr>
<tr>
<td>White Processed Pea Beans</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Two buyers and two sellers</td>
</tr>
<tr>
<td>Soft Wheat Grade 3</td>
<td>No trade was Executed. But the highest bid was Birr 559 and the lowest offer was Birr 568</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: ECX information desk and personal computation

In summary, observation of the six trades indicated that a total of 167 contracts (8350 quintals; 1 contract is 50 quintals) were executed. The target volume expected to be traded was not clearly set. But as per the physical observation made during the trade days, it was easy to understand that the trade was not undergone to the satisfaction of the Senior Management of the ECX. This suggested that a lot should have been done in increasing the supply in advance. It might be justified by the fact that the ECX is launched when the prices of agricultural commodities are reaching at historic highs and supply is in short of demand. But, even such predictions were not made before the implementation period.

Moreover, Sesame Seed is one of the four commodities in which the ECX designed a contract to trade it in its first phase. But, during the six days of trade, it was not available at the trading pit of the ECX since there was no supply. Consequently, such unexpected outcome might slow down the momentum of the change introduced to transform the inefficient agricultural market. Some experts argue that the absence of Sesame Seed trade coupled with the low trade volume for the other three commodities is an indication that the launch of the
ECX was not be in the proper period. They suggested that November or December would have been a much better time since the commodities are available in bulk during such periods.

3.3 The Commodities

The ECX started trade in four agricultural commodities namely: Wheat, Maize, Sesame Seed and Pea Beans. The selection of these commodities is on the ground that high volume commodities will ensure the liquidity of the contracts. It will start trading Teff and coffee, and possibly chickpeas, lentils and sorghum in the near future.

The absence of other high volume commodities such as coffee at the launch of the ECX might discourage high net worth investors who are involved in the export business. The high dependence of Ethiopian Agriculture on rainfall conditions is another key challenge. Besides it is launched at a time when commodities are not available in bulk and famine is threatening about four million of the population. Generally, it is around November and December that bulk quantities of agricultural produces are available. For details of the volume of ECX traded commodities, please refer table seven.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004/05</td>
</tr>
<tr>
<td>Maize</td>
<td>2.4</td>
</tr>
</tbody>
</table>
### 3.4 The ECX Model

The ECX model is designed by considering the following contexts. Thus, the following strong points of the model could be utilized by the ECX as an opportunity to attract the required liquidity.

- Market stakeholders were engaged in the design process; and
- A gradualist approach in the sense that the development of the ECX largely depends on the evolution of trust and integrity and confidence in the market mechanism.

The ECX model is structured into the following major categories: Warehousing and Grading, the Trading System, Clearing and Settlement, Informing the Market, Rules and Regulations and Risk Management.

#### 3.4.1 Warehousing and Grading

Unlike other Exchange practices where warehousing and grading is done by an independent institution, the ECX made this function by itself. As per its philosophy, this is done until a well organized company capable of doing this function with independence is to be established.

<table>
<thead>
<tr>
<th></th>
<th>2.2</th>
<th>2.2</th>
<th>2.4</th>
<th>2.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haricot bean</td>
<td>0.3</td>
<td>0.2</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Sesame</td>
<td>1</td>
<td>1.4</td>
<td>1.4</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Source: www.ecx.com.et
It started operations with the warehouse leased from Ethiopian Grain Trade Enterprise located in Addis Ababa. It planned to roll out in Nekemete, Nazareth, Shashemene and Bure in the near future. This might bring both an opportunity and challenge. The opportunity is the ECX can control the standard of the commodities while the challenge is the market actors may question the independence of the warehouse operations from government interventions.

However, which one will prevail remains to be seen as time goes on. On the other hand, as per the press statement of the ECX dated the 9th of May, 2009, “each warehouse is equipped with a grading laboratory and quality control specialists trained to global standards by U.S professionals”. This suggested that the quality of the commodities coming to the ECX warehouses can be reasonably assured and maintained.

Though there are only four commodities, the ECX is able to design 25 contracts through the help of standardization and grading attached to the commodities. The obvious challenge is the consistency of grades and the fair representation of the commodities by the samples. The challenge is not only accepting substandard commodity but in liquidity context rejecting the standard commodity due to sampling and/or grading error.

When depositors bring their commodities to the warehouse, they will be provided with warehouse receipts as an authentication of ownership. Warehouse receipts are the basis of trade at the pit of the ECX. The minimum allowable deposit is 50 bags (one contract).

Storage is intended for ECX Trading but trading is not mandatory. In case of withdrawal without sale, there will be a penalty. Moreover, Penalties will be charged in case of expiration of warehouse receipt and late pick up beyond 10 days after Trade. New warehouse
receipt is issued as soon as title is transferred to the buyer. The Warehouse Handling Charge is Birr 1.45 per bag per day and Daily Storage Service Charge Birr.04 per bag.

3.4.2 The Trading System

Trading on the ECX is done exclusively by members or their authorized representatives. The members purchase a permanent and freely transferable trading right known as a membership seat. Members or Floor Representatives trade openly and verbally on a trading floor by ‘crying’ out their price. They indicate the commodity type, grade, quantity, and the price they were seeking by shouting. If the buyer wants to sell what he/she buys, he/she must wait till the next trading day. i.e., it is not possible to buy and then sell the same commodity at a single trading day. For details of the terms of the contract, please refer table eight.

| Table eight |
| Terms of ECX traded contracts |

| Trading unit | 50 Quintals (one Isuzu Truck) |
| Price Quote | All price are to be quoted arrived in Addis Ababa |
| Daily Price Limit | The daily price limit is the maximum amount fixed by the ECX that prices are permitted to rise and fail |
| Position Limit | The amount a trader can buy or sell in one trading session (10,000 Quintals or 200 contracts) |
| Maximum order size | The amount that a member can buy or sell at one transaction (1,000 Quintals or 20 contracts) |
Brief description of the trading process is as follows.

a. Buyers/ sellers bid/offer by ‘crying’ out their price;

b. When the buyer and the seller arrive at a mutually acceptable price, verbal confirmation followed by a signing of ticket;

c. Afterwards, both parties must submit the order ticket to the trade entry clerk, who time stamps it and records in the ECX system; and

d. The accepted orders are then sent for settlement, and the Floor Representative gets a reconciliation report.

The key opportunities in adopting an open out cry method is its transparency as the members and/or their floor representatives can easily observe who is offering and biding for what price.

However, it might be difficult to comprehend what is going on the trading pit especially when the volume of the trade increases. During the first six trading sessions, it was common to observe some members offering higher price and bidding lower price while some other members are offering lower price and biding higher price. How can a rational member buy at
higher price while some other member is offering at a lower price? In online trading, this will not be a problem because the computer system automatically matches the lowest offer and the highest bid in time order.

Besides, if the seller has two or more warehouse receipts, he/she shall fill two order tickets as the computer system does not accept more than one warehouse receipt number. This will create operational inconsistency on the members and thus will reduce their interest. However, effort has been made to adapt the computer system to the needs of the members. On the other hand, designing the minimum contract size to be one Isuzu Truck (50 Quintals) is an opportunity as it is the accustomed trading mechanism in the other physical markets.

3.4.3 Clearing and Settling Transactions

Unlike international practices, clearing and settlement is conducted by the ECX itself. Members are required to open member pay-in/client pay-in and member pay-out/ client pay-out accounts at the Dashen Bank and Commercial Bank of Ethiopia. Thus, the ECX can withdraw money from member pay-in/client pay-in account balance and transfer it to the member pay-out/ client pay-out account. Members/ clients can not withdraw money from pay-in account without the authorization of the ECX.
The Central Depository Division of the ECX generates Electronic Warehouse Receipts that identifies legal title to Commodity in the Warehouse. It is transferable and negotiable on the ECX. But at the ECX context, warehouse receipts can not be used to secure Collateral Financing indicating that one of the major benefits of the warehouse receipts is missing.

3.4.4 Informing the Market

The ECX disseminates information on radio, television, electronic price displays. The electronic price displays will roll over in 200 woreda centers and print media. As part of its effort to inform the market, it published its first weekly publication bulletin on the 9th of May, 2008. This effort may create an opportunity induce positive image which is a key ingredient to attract demand and supply on the trading pit. However, does the current telecommunication infrastructure allow efficient disseminate information might be an important challenge.

If the price at the ECX is higher than other physical markets, it will create inflation. This will not be welcomed by the government. During the 1960s and the 1970s, the Government of India suspended trading in several commodities like cotton, jute, edible oilseeds, etc, as the government felt that these markets were increasing the price of commodities (Multi-Commodity ECX of India, 2007).

3.4.5 Rules of the game
As per Proclamation No. 550/2007, the ECX has been authorized to develop rules for the governance of its business. The major building blocks of its rules are the following.

- **Fairness** – equitable and neutral access to the market and non-discriminatory treatment of all.
- **Transparency** – prices are readily and openly available to all market participants.
- **Efficiency** – rapid, accurate and cheaper price discovery mechanism.
- **Order** – avoid disruptive, manipulative and dishonest practices.

Following its authorization the ECX has developed rules and regulations. For instance, article 14.4, sub article 14.4.1 of the ECX states that “the exchange may specify the maximum and minimum brokerage rates, which shall be adhered to by the members of the exchange while dealing with their clients. Such brokerage rates may be commodity specific absolute figure or in terms of percentage on value of contract irrespective of class of commodity. The maximum brokerage rate for the time being shall be 2% or s deemed appropriate by the Exchange”.

Moreover, the members through their associations develop rules to regulate its members through the adoption and enforcement of rules of conduct for fair, ethical and efficient practices.

The enforcement of these rules and regulation might create a positive perception by the members in particular and the stakeholders in general that the playing field is equitable and efficient.
3.4.6 Risk Management

The ECX believes that risk management is central for its normal day to day activities. Accordingly, the major risks identified are as follows:

- Operational Risks: Risk of loss resulting from inadequate or failed internal processes, systems or people.
- Market Risks: Risks to the integrity of the market due to foul play or negligence by participants or poor market design.

However, the major risk which is the subject of this research project (liquidity risk) is not clearly addressed on the risk management strategy. This suggests that issues which might adversely affect its liquidity are not identified.

3.4.7 Conditions for Trade to be Rejected

Trades in the ECX will be rejected for a variety of reasons. Among the most common reasons the following are frequent.

- Total order quantity in the session exceeds warehouse receipt quantity;
- The day’s trade total exceeds the buyer’s member pay-in account balance; and
- The day’s trade total exceeds the buyer’s client pay-in account balance.
When order quantity in the session exceeds warehouse receipt quantity, trade may be rejected and the seller may also be penalized. But what will happen to the genuine counterparty (buyer)? The very concept of an exchange is avoiding counterparty default risk either party is facing. The same holds true when the total daily trades exceed the buyer’s member pay-in account balance. Until this project paper is finalized, the ECX did not design any system on how to handle such issues. As Hicks (1969) pointed out “Exchange is trading in promises, which is futile unless there is some reasonable assurance that the promises will be kept “.

3.4.8 Governance

A hybrid model of governance is developed with the following characteristics:

- Demutualized structure with separation of ownership, membership, management;
- State owned (initially) entity;
- Member owned permanent trading seats;
- Joint Owner-Member Board. Of the 11 Board Members, 5 are represented by the members and the other 6 are represented by the government;
- National ECX Actors Association;
- Independent professional management; and
- Regulatory authority reporting to the Prime Minister office.

This model is an opportunity for improving governance through a balanced management of major stakeholders. Thus, the members and stakeholders might not doubt the independence of the institution. However, the model is not without problems. Of the 11 Board Members, 5 are represented by the traders. As a result, the potential conflict of these board members in their dual role of overseeing the ECX’s activities and trading on its Pit is another major challenge.
3.5 The ECX Ecosystem

3.5.1 Members

The ECX has two types of membership category: Trading Member who trade only for their own account and Intermediary Member who trade for their own account as well as for non-members. Thus, Non-Members can trade on the ECX as Clients of Intermediary members. Before Intermediary members trade on behalf of Clients, they must first enter into a Member Client Agreement. These groups identified are the major actors for the operation of the ECX. The conditions for membership are the following (Ethiopia Commodity Exchange, 2007).

➢ Financial Requirements

- Payment of Membership Seat price Birr 50,000
- Net Worth: Audited financial statement. Birr 500,000 and Birr 1,000,000 net worth for Trading Member and Intermediary Member respectively.
- Provision of refundable Security Deposit in ECX Settlement Guarantee Fund for the duration of membership. Birr 200,000 and Birr 300,000 for Trading Member and Intermediary Member respectively.
- After the first year, payment of annual Membership maintenance fee: Birr 5,000

➢ Other Requirements

- Recognition by the Ethiopian Commodity Exchange Authority as an Exchange Actor.
• Evidence of commercial activities in exchange-traded commodities either on own account or on behalf of others.
• Tax registration and maintenance of tax clearance according to Ethiopian law, where applicable.
• In case of individual: proof of identity, residence, business, and education.
• In case of private limited company: copy of the Memorandum and Articles of Association.
• In case of Share Company: copy of the Memorandum and Articles of Association.
• In case of partnership: copy of the Partnership Agreement.
• In case of cooperative: copies of the Memorandum and Articles of Association.
• In case of public enterprise: copy of the establishing law.
• Successful completion of Authority-approved Certification examination.
• Personal interview with the Exchange, and in the case of Share Company, with all authorized signatories.

Most businesses do not maintain proper accounting records and if they do it is not audited unless they are requested by banks for loan analysis. So the requirements might stimulate the potential members to move away. Moreover, some might fear that their financial transaction can be easily tracked by the Federal Inland Revenue.

The members need to negotiate only on the price and number of contracts since the other major issues are standardized by the ECX. The contract is a standardized on: Product quality/grade, lot size, delivery terms and conditions, Payment terms, Price quotations and dispute settlement. Till May the 9th, 2008 60 members have been accepted. Another 53 are in the process of completing their application for membership.
The perception of the members in particular and the stakeholders in general as to the independence of the ECX is of paramount importance to its success. The lack of trust by Ethiopians on the institutions is a key challenge. For instance, opinion poll collected by an American Public Opinion Research Group indicated that only 25% of the Ethiopians have trust on courts (Addis Neger, 2008).

The behavior of the market actors is another important challenge. Extensive empirical analyses of Ethiopian market behavior 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 and across time are limited (Gabre-Madhin et al, 2003).

### 3.5.2 Logistic Companies

The National Task Force on ECX Development (2006, p.23) indicated that some of the underlying issues facing the individual countries attempting to establish exchange have been the weak liquidity in national markets that make it difficult for them to be financially viable. Moreover, the lack of necessary infrastructure and key support institutions for efficient trade is also a major impediment. Thus, exchanges have had difficulty providing services of real value to users.
a) Transport Companies

The members are required to transport their commodities to the warehouses. Thus, the ECX will not have direct link with transport companies. However, who shall insure the commodity when it travels from outlying areas to Addis is an issue not addressed by the ECX. In addition as per the assessment of Task Force on ECX Development (2006, p.34), Ethiopia’s main producing areas and markets are mainly located far from the port and because the logistics and handling systems are inefficient; the transport costs of moving grain are high.

b) Telecommunications

The ECX is closely working with Ethiopian telecommunications as its information dissemination strategy depends on the availability and efficiency of telecommunications infrastructures. The ECX plan to deploy 200-250 rural electronic price tickers at the woreda level will not be successful if the necessary infrastructure is missing.

c) Markets

The ECX recognizes that other physical markets such as”ehil berenda” are operating along with it. Thus, any developments occurring outside its trading pit affect it either positively or negatively. In this regard, the presence of a dedicated Market Surveillance Department helps it to monitor external environments so as to design appropriate response.

d) Lending companies
Under the existing system, the warehouse receipt is not used for collateral financing. But the ECX depends highly on the efficiency of its settlement banks as its clearing and settlement system is linked with them.

**e) Legal and Political infrastructure**

One of the reasons for failure in exchange regional initiatives in other parts of the world has been the lack of political will (UNTACD, 2007). However, the ECX has the necessary political will and support required to push forward. The strategy of the government is Agricultural Led Development Industrialization. The proclamation of a national warehouse receipts system in 2005 (Proclamation No. 550/2005) is also an opportunity that the ECX may exploit to induce supply of commodities.

**f) Regulation**

The Ethiopian Commodity Exchange Authority is established by proclamation 551/2007 with a view to:

- Protect market users and the public from fraud, manipulation, and abusive practices;
- Promote open, competitive, and financially viable commodity market; and
- Educate the general public on the principles and benefits of the ECX.

These major objectives of the Authority if properly informed to the stakeholders especially to the members create an opportunity to build confidence that the activities of the ECX are
continuously regulated. However, it all depends on how the Authority is perceived by the members in terms of independence and capability.

3.6 Implementation Design

The ECX starts operation with spot trading and through time it will devolve into future trading. A phased approach, rather than a pilot approach, is designed for implementing the ECX initiative.

Accordingly, three phases are envisaged, where the ECX starts with the Addis Ababa warehouse, trading on only the selected commodities, with the warehouse operated by the ECX itself. In Phase 2, an additional 8 warehouses, also ECX operated, are to be introduced into the system and more commodities can be included. In the third phase, additional warehouses can be added; the warehousing can be devolved to independent operators, with ECX accreditation. As the financial system, the Information communication Technology system, and the experience of the ECX develop, forward and future contracts may be introduced.

As per the Ethiopian Development Research Institute Policy (2005), developing new exchanges are often most viable if they do not concentrate on introducing futures contracts early on, but rather, on trading physical goods alongside warehouse receipts or on providing a credit function. Thus, starting trade on spot has the advantages of gaining experience before directly starting trade on future which is much more complex.
However, the challenge is, unlike futures trading spot trading needs the existence of commodities in the warehouse. Such requirement indicates that the volume of trade in spot contract is inseparable from the volume of commodities. In case of supply shortage which is currently the case in domestic as well as international markets, the liquidity of the ECX will be at stake.

CHAPTER FOUR

CONCLUSION AND RECOMMENDATION

4.1 Conclusion

The ECX is the first of its kind in the Ethiopian modern marketing innovation. Through analysis of its model indicated that an effort has been made during its design to consider the realities of the country. However, the major issue which is the main subject of this research
project (liquidity risk) is not clearly addressed on its risk management strategy. These overlooked issues might have undesired consequences in terms of the effort to attract the required liquidity.

The findings of the research suggested that there a lot of challenges that the ECX might encounter in its ongoing operation. The brief summary of these challenges is as follows.

- The current situation of sharply rising domestic and global food prices;
- The high dependence of Ethiopian Agriculture on the rainfall condition which might create shortages of supply in case of drought;
- The frequent rejection of commodities due to failure to meet the quality standards will de-motivate depositors to bring commodities the warehouse as the cost of transporting, loading and unloading and searching any other warehouse is high;
- The tendency to use outdated closing price as reference price to determine price limits (price filter) may de-motivate buyers and sellers in the case of decreasing and increasing price patterns respectively;
- The possibility of government interventions especially in case of increasing price patterns;

- The consistency of grades and the fair representation of samples;
- The main producing areas and markets are mainly located far from the port and because the logistics and handling systems are inefficient;
- The existing telecommunication infrastructure may not be conducive enough to efficiently disseminate information using electronic price tickers;
- The fact some of the Board members are traders themselves and the potential of insider trading;
The 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 and across time are limited;

- The lack of trust by Ethiopians on the institutions;

- The financial disclosure requirements as well as the tracing of the trade volume at the trading pit of the exchange may induce the potential members to move away owing to the fact that their financial transaction can be easily tracked by the Federal Inland Revenue;

- The fact that Ethiopia’s main producing areas and markets are mainly located far from the port and because the logistics and handling systems are inefficient; the transport costs of moving grain are high; and

- Unlike futures trading, spot trade needs the existence of commodities in the warehouse. Such requirement indicates that the volume of trade in spot contract is inseparable from the volume of commodities.

On the other hand, the major opportunities of the exchange are the following.

- The necessary political will and support required to push forward is already ensured;

- Ethiopia is the second largest maize producer in Africa;

- The annual cereal production in Ethiopia is 14 million tons surpassing that of South Africa by 3 million tons in recent years.
The inclusion of relatively high volume commodities at the first phase;

- The open out cry method is transparent and thus the members and/or their floor representatives can easily observe who is offering and bidding for what price; and

- Starting trade on spot has the advantages of gaining experience before directly starting trade on future which is much more complex.

### 4.2 Recommendation

Quite obviously, the ECX should recognize the significance of liquidity and should consider it among its top strategic agenda. In this regard, the challenges and opportunities identified in this paper should be taken to start the journey. After critically analyzing the worth of these initial findings, it should include any other challenges and opportunities to be identified by itself and design the road map to attract the level of liquidity that must be there. Then it might justify why the big investment is made by the government.

Specifically, the ECX should:

- Make it clear to all its stakeholders especially to the government that the Exchange is not a price stabilizing scheme;

- Discuss with relevant government organs on how to attract potential members. For instance, institutional buyers and sellers such as universities and big farms can be accepted as members with less stringent requirement. In this regard, the ECX can utilize the support of the government it already assured;
Educate the public on what the exchange is all about. Emphasis should be made on teaching the farmers at the grass root level through their cooperatives on how to handle commodities after harvest so that quality might be kept after harvest. Moreover, there will not be frequent rejection and subsequent embarrassment when depositors bring it to the warehouse;

- Devise an optimal balance on how the interest of members is to be reflected by Member Boards without the potential of insider trading;
- Arrange on how to treat commodities which are rejected but can be accepted by making some treatments to it (Fumigation);
- Give training to its employees especially to those who are working under the warehouse operation on how to handle customers;
- Set the price limit of the trade day using updated reference price. Up until it starts trade daily it should relax or tighten the percentage to be applied on the closing prices to consider the price volatility; and
- Try to include high volume commodities such as coffee into its trading pit as soon as possible.