



**Addis Ababa University School of Commerce  
Department of Marketing Management**

**Factors Affecting Export Performance in Ethiopia**

**By**

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**A Thesis Submitted to Department of Marketing Management, Addis Ababa University School of Commerce in Partial Fulfillment of the Requirement for the Award of Degree of Masters in Marketing Management**

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## Declartion

I ,**Tewodros Amare Kassa**, hereby declare that this study entitled “**Factors Affecting Export Performance in Ethiopia**” is my original wrok prepared under the guidance of my advisor,**Dr Temesgen Belayneh** (Ph.D).

This paper is submitted in partial fulfillment of the requirement for the Award of Master of Arts Degree in Marketing Management and it has not been submitted to any diploma or degree in any college or university. I would like also to confirm that all the sources of materials used in this study are duly acknowledged.

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Name	Signature	Date
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## Statement of Certification

This is to certify that **Tewodros Amare Kassa** has carried out his research work on the topic entitled “**Factors Affecting Export Performance in Ethiopia**”. The work is original in nature and is suitable for submission for the Award of Masters Degree in Marketing Management.

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## Approval of Board Examiners

Addis Ababa University School of Commerce Department of Marketing Management

Post graduate program

### **Factors Affecting Export Performance in Ethiopia**

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## ABSTRACT

*Foreign trade in general and specially export is very essential for the overall development process of any country. However, when the case is to the Ethiopian economy, export remained at its poorest performance. Therefore, this study mainly aims at investigating the main macro and micro factors affecting export performance of Ethiopia. A Quantitative and qualitative research approach, particularly descriptive and co relational research method has been adopted to address the objectives. Furthermore, the standard OLS method of estimation, particularly ARDL approach to Co-integration is used to estimate the long run and short run models. The findings of the study indicate that the trend for export growth and the share of export to GDP in the pre 1990/91 have shown very erratic growths and full of ups and downs which lacked consistency. Similarly, in the post 1991/92 regim, though many incentives and measures have been taken, the export earnings are still less and trade deficit is still very significant and the export performance is questionable. It is also found that real GDP, openness of the economy and foreign direct investment are the variables that have positive impact and their effect is significant. However, real effective exchange rate and trade tax are among the variables that negatively affected the export performance of the country. But, infrastructural development and policy & regim changes have found to be insignificant and with no effect towards the export performance. Therefore, it is concluded that the export sector of the country lacks capacity to finance import and its growth rate is very erratic and its composition is limited to the agricultural products leaving the share of industrial products at its minimum. It is also concluded that most of the exporters in the country do not implement theoretically advocated marketing strategies. Thus, it is recommended that the government has to reconsider the incentives provided to exporters and follow on their effective implementation. Similarly, exporters should hire skilled and professional marketing advisors and the export investments should be further encouraged so that industrial products could be exported.*

**Key Words:** *Export performance; Determinants of export performance; Auto Regressive Distributive Lag Model, marketing strategies,*

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## ACCRONYMS

ADF	Augmented Dicky Fuller
AIC	Akaike Information Criterion
ARDL	Auto Regressive Distributed Lag
CLRM	Classical Linear regression model
CSA	Central Stastics Agency
ECM	Error Correction Model
ELG	Export Lead Growth
ERCA	Ethiopian Revenue and Customs Authority
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
IMF	International Monetary Fund
LDCs	less Developed Countries
MoFED	Ministry of Finance and Economic Development
NBE	National Bank of Ethiopia
OECD	Organization for Economic Co-operation and Development
OLS	Ordinary Least Square
SBC	Schwartz Bayesian Criterion
UNCTAD	United Nation's Cooperation for Trade and Development
WB	World Bank
WTO	World Trade Organization

# CHAPTER ONE

## INTRODUCTION

### 1.1. Background of the Study

The role of exports in economic development has been widely acknowledged. Ideally, export activities stimulate growth in a number of ways including production and demand linkages, economies of scale due to larger international markets, increased efficiency, adoption of superior technologies embodied in foreign-produced capital goods, learning effects and improvement of human resources, increased productivity through specialization and creation of foreign direct investment( Giles and Williams, 2000).

While practical evidence in support of export-led growth (ELG) may not be universal, rapid export growth has been an important feature of East Asia's significant record of high and sustained growth. In particular, the wave of growth in the four tigers (Hong Kong, South Korea, Singapore and Taiwan) and the Newly Industrialized Countries (such as Malaysia, Indonesia and Thailand) has been used to support the argument that carefully managed openness to trade through an ELG is a mechanism for achieving rapid growth (Giles and Williams, 2000).

Various researches have been conducted on the barriers to export which are defined as the attitudinal, structural, operational and other constraints that hold back the firm's ability to initiate, develop and sustain international operations Leonidou(1995). Besides, according to WB (2001) cited in Nega (2013) ,structural problems, weak policy frame works and institutions, protection at home and abroad, the structure of African exports which is characterized by dependence on primary commodity (Alemayoh 2006) are considered as the reasons for Africa's poor export performance.

Moreover, Africa's trade performance is too low. Its total exports being around 3% of the global total trade while its intra-continent trade is also low amounting to 10% of the overall exports of the continent. This poor performance is explained by the weak diversification of African trade in terms of structure and destination, the trade protection that prevails in the rest of the world is against African products, the economic structure of African countries which is mostly characterized by agriculture based economy, poor institutional policies, poor infrastructure, weak financial and capital markets, political

instability, insecurity in several regions and intra-African trade barriers (OECD, 2010). Like the many African countries Ethiopia's export has been faced with the mentioned problems and it was also limited only to a few agricultural commodities for a long period of time.

According to the World Bank (2009), the share of Ethiopia's export of primary products to the total export is 91 percent while that of China is 0.6 Percent. Having the facts stated above the export structure of Ethiopia has been characterized by greater concentration on few traditional exports such as coffee, hides and skins and oilseeds and pulses . From the total exports of the country coffee was the dominant export commodity accounting for an average 21.9 percent of the country's total exports.

Similarly, from the international marketing perspective in the year of 2007 international merchandise exceeded US \$ 10.5 trillion and world trade in services is estimated at around US \$ 2.4 trillion Doole and Lowe (2008). However, the share of Ethiopia in international market is low which accounts 0.01percent (WTO, 2011).

On the other hand the global market place consists of a population of 6.6 billion people which is expected to reach 10 billion by 2050 according to the projections prepared by the United States. As a result the top 500 companies in the world now account for 70 percent of world trade and 80 percent of the international investment. To strategically position themselves for global competitiveness, companies are consolidating through mergers, acquisitions and alliances to reach the scale considered necessary to compete in the global arena. As the same time there is a trend towards global standardization as companies for world standards for efficiency and productivity Doole and Lowe (2008).

As it is explained above, export performance is variant across the world. Especially developing countries such as sub Saharan Africa, low-income countries are described by low level of export performance. In response to this the study conducted by Drama & et al. (2014) on determinants of export performance in the case study of Zanzibar shows that export performance is affected by export price of major products, farm gate price, export demand, human capital development, world income, foreign direct investment and production of the most exported product. Besides the study conducted by Marandu.E(2008) the export performance that firms achieve are associated with the kind

of strategy firms elect to follow, particularly the choice of product markets and marketing mix decisions.

Belayneh and Wendaferahu (2013) on their part also investigated the determinants of export performance in Ethiopia for the period of 1970/71-2010/11. Their study showed that real GDP of trading partner, real effective exchange rate, and openness of the economy, Real GDP of home country, public expenditure in transportation and communication and private sector credits affect export performances of the country.

Generally, different authors tried to explain the determinants of export performance. However, their result showed that export performance can be affected by many variables depending the country's export structure, level of development, existence of manufacturing companies, trade liberalization, and export marketing strategy in the international market. As a result, it is plausible in this research to asses and examine these factors in different way and covering different time.

Therefore, the main focus of this study is identifying the main factors that have contributions to the poor performance of export in Ethiopia.

## **1.2. Statement of the Problem**

It is clear that, the importance of foreign trade in the development process is vital and can be considered as the life blood of global market. Exports are an important part of international trade, which accelerates economic growth and maintains favorable trade balance. For any economy, the importance of export can be looked in terms of direct and indirect benefits. Direct benefits include increased foreign exchange earning and factor productivity where as the indirect benefits include efficient resource allocation, greater capacity utilization via economies of scale, technological improvements and increased labor surplus economy ( Abor, 2011). Export diversification has also a strong effect on per capita income Agosin (2007). Besides, Export leads to achieve productivity. The achievement could be attributed to economies of scale and large production scale better than the small domestic market (Sousa, 2004).

Currently many developing countries have been working towards export to increase their share in international market. According to Bacchetta (2007) developing countries have increased their export performance through time. Asia in general and china in particular accounts the lion share of the change which has been facilitated by export diversification. While Asia's share in total export increases from 11.7% to 21.5 %, Africa's share decreased from 4.3% to 2.9% during the years of 1985 to 2005.

Similarly, Ethiopia's export performance is faced with the challenges as many African countries are also hindered by these challenges. The export sector in Ethiopia has been poor while import request remained high relative to the Asian countries with the exception of Vietnam( IMF ,2014) .Exports of goods in Ethiopia are only about 7 percent of GDP and it accounts only 0.01% of the world export in 2010 (WTO, 2011). The low export per GDP ratio results to low capacity in financing the import sector and low market share, which in turn affects the economic growth in particular, and economic development in general (Belayneh and wendaferahu, 2013).

In addition, in the existing literatures, there are controversial issues among the factors that affect the export performance. For example, variables like FDI and Openness of the economy affect export performance both positively and negatively at the same time. both factors ( Seyyed & et.al. 2011,).So such controversies need to be clarified with regard to

the literature. Moreover, researches conducted in Ethiopia in the area of export performance by Belayneh and Wendaferahu(2013),Debel(2002),Nega(2013) ignores important variables in which the factors are identified in other countries as determinant factors for export performance. For example, the researches with similar area of study conducted by Majeed and Ahmed(2006), Skosan and Kabuya(2014 )and Drama &et.al(2014 ) in other countries incorporated variables like indirect taxes which have significant effect on the export performance. In addition, Policy and regime changes were not considered in the research conducted in Ethiopia. Thus, those are gaps in the literature and the variables that have been incorporated in the export performances and with significant effect should be examined if they can have an impact in the poor export performance of Ethiopia. Similarly, in the existing literature on the Ethiopian export performance, export marketing strategy, export entry strategy and international marketing information consideration have not been assessed so far. So, it seems sound to deal with the firm's strategic response to the internal and external forces of export marketing. Therefore, it is crucial to look on the assessment of the export marketing strategies and the deal with the macro variables or external forces if they have an impact on the Ethiopian export performance in which such an investigation has not been well addressed so far in the national perspective.

Hence, identifying the principal factors that affect export performances in the country is very essential. Similarly, assessing the micro variables such as export marketing strategies, export entry strategy and international marketing information is again equally important. However, the absence of close attention towards these internal and external factors to export firms can lead to the low performance of export which is very sever for the reason that the balance of payment could remain to be deficit. So, dealing with a study on such variables is very beneficial.

In its effect, business societies will be facing with shortage of foreign currency to participate on productive investment like manufacturing firms and the consequence will turn back to less productivity in those value added investment areas. On the other hand primary product producers will be discouraged by the profit motive from the primary products and willingness to work in the agriculture sector will be declined. Having those

conditions it is unthinkable to have a competitive and comparative advantage to perform export as expected. Therefore, such a study is very topical and timely. As Drama & et al (2014) noted that whenever producers are highly paid for their production they are motivated to produce more and devoted their time resource to the production. Especially in countries like Ethiopia in which the government has an active role in the economy weak effort in export performance leads to deficit the trade balance.

Thus, this study is conducted to fill all the above identified gaps by examining the factors affecting export performance in the country seeking to answer the research questions about what are the macro variables that have an impact on the export performance and how do the firm's internal forces can be assessed towards the Ethiopian export performance. It is, therefore, to search answers to these questions that this study is conducted.

### **1.3 Objectives of the Study**

The study has both general and specific objectives as mentioned in the following.

#### **1.3.1 General Objective**

The general objective of the study is investigating the main factors affecting export performance of Ethiopia.

#### **1.3.2 Specific Objectives**

In order to demonstrate the main objective of the study, there should be clear and precise specific objectives. Accordingly, the study is intended to achieve the following specific objectives to ultimately demonstrate the main objective.

1. To analyze the overall export policy reforms, trends and composition of export in Ethiopia
2. To assess the export marketing and entry strategies and availability of international market information with regard to the Ethiopian export performance
3. To identify Macro economic variables that affect export performance of the country

4. To examine the effect of Government policy changes on the export performance of the country.

#### **1.4 Hypothesis of the study**

Based on the studies conducted previously and reviewed in the literature this study is examined to test the following hypotheses.

H<sub>1</sub>: Gross domestic product is expected to correlate positively with the Export performance

H<sub>2</sub>: Foreign Direct investment as percentage of GDP is expected to correlate positively with the export performance

H<sub>3</sub>: Real effective exchange rate is expected to relate positively with export performance

H<sub>4</sub>: There is positive relationship between infrastructure development and export performance

H<sub>5</sub>: Import plus export to GDP ratio is expected to correlate positively with export performance.

H<sub>6</sub>: There is a direct relationship between indirect taxes to GDP ratio and export performance.

H<sub>7</sub>: government policy change to promote export is expected to have positive effect on export performance.

#### **1.5 Significance of the Study**

This study has two basic importances. First, it deals with examining the performances of the export sector in the county and the factors affecting the export performance so that, it can serve as an input for policy decisions that enables the government and business society in establishing effective and efficient export Sector. Second, this study has some value in narrowing the unfilled gap in the existing literature and it will encourage further studies in this area serving as a reference and motivate other researchers to go for further studies.

#### **1.6 Scope of the Study**

This study mainly focuses on examining factors affecting export performance in Ethiopia covering the period between 1974/75-2014/15 and assessing the export marketing and entry strategy as well as availability of international market information. Here, with

regard to the macro factors, important variables, which are theoretically supported in having implication on the performance of export, are considered. Accordingly, real gross domestic product, real effective exchange rate, openness of the economy, Infrastructural development, indirect taxes and foreign direct investments are considered as the potential macro-economic variables that affects export performances of the country. In addition policy and regime change is also included via dummy variable. Similarly, variables such as export marketing strategies, export entry strategy and availability of international market information are the concerns of this study. However, the micro variables have not time series data and thus only an assessment is made towards their linkage to the export performance in the country. The study also focuses on the overall export policy reforms, trends and composition of export.

### **1.7 Limitation of the Study**

The main limitation of this study is non-availability of time series data on marketing strategies. As a result, only an assessment is made qualitatively towards their say on the export performance of the country at a point of time.

### **1.8 Organization of the Study**

This study is organized in to six chapters. The first chapter, which is the introduction one deals with back ground of the study, statement of the problem, objective, significance, hypothesis, scope and limitation of the study. The second chapter addresses review of theoretical and empirical literatures about export composition, and the determinants of export sector. Research design and methodology of the study is discussed in chapter three. The fourth chapter describes the overall export policy reforms, trends and composition of export. Model estimation and interpretation of regression results is presented in chapter five. Finally, the study is winded up in chapter six by making conclusion and recommendations.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2. Introduction**

The purpose of this chapter is to review the existing literatures that supports in designing the methodology specially model specification and data analysis. Accordingly, the first part relates with theoretical back ground of important concepts of export .the second part focuses on the empirical studies of factors affecting export performance in Ethiopia. This is therefore, the theoretical literature of the research focuses on the definition of concepts, their importance, trends and other theoretical backgrounds of trade theories. The empirical research focuses on the efforts made to promote Ethiopian export that is used to examine the trends and composition of exports and the empirical evidences up on the determinants of export in Ethiopia.

#### **2.1 Theoretical Literature Review**

This section reviews export trade related theoretical perspectives or concepts and various theoretical models in export performance. The macro economic factors that affect the performance of export are reviewed in this section.

##### **2.1.1. Definition of Export performance**

International trade deals with the flow of commodities, services and capital across national boundaries. Trade in commodities refers to imports and exports of merchandise. Services involve such activities as shipping, travel, insurance, or tourist services performed by companies of one country for residents of another. Capital flows refers to setting up plants in foreign countries or to acquisition of bonds, stocks and bank accounts in one country by residents of another country krenin(1971) .

Exports means to earn more currency for the country and the most traditional way to enter international markets is product. Governments are usually favored development strategy of export.

Companies that give a positive response to received orders are called exporter of random. But active exporter is company that planning and tries for ordering (Farhangi & Lotfi, 2009).

The conceptual definition of export performance addresses two parts- Export and performance. Export is the international marketing related decisions and activities of internationally active firms (cavugil and neviv 1981).The word performance in the

literature is the act of carrying out or accomplishing something such as the task or action. When it comes to economics this word has been defined in many ways and no unifying principle has underlined its quantification.

However, in the context of current study export performance is defined as

- The success or failure of the efforts of a nation to sell domestically produced goods and services in other nations markets (Zou and stan 1998) cited in (Nega,2013)
- The export effectiveness, export efficiency and continuous engagement in exporting(shoham,1991) cited in( Nega,2013)
- Export marketing strategy: is the means by which a firm responds to the interplay of internal and external forces to meet the objective of the export venture Cavusgil and Zou's(1994)

### **2.1.2. Trade theories**

The idea, that international trade brings economic growth and increases the welfare of a nation, started during the 18<sup>th</sup> century by a collection of economic thoughts who advocated an economic philosophy known as mercantilism. Mercantilism cannot be classified as a formal school of thought, but rather as a collection of similar attitudes toward domestic economic activity and the role of international trade that tended to dominate economic thinking and policy during the period. The Central point to Mercantilist thinking was the view that national wealth was reflected in a country's holdings of precious metals. In addition, one of the most important pillars of Mercantilist thought was the static view of world resources. Economic activity in this setting can be viewed as a zero-sum game in which one country's economic gain was at the expense of another. According to mercantilists for a nation to become rich and powerful, it has to export more than it imports where the resulting export surplus is used to purchase precious metals like gold and silver. Hence, the government in its power has to control imports and stimulate the nation's exports (Aplleyard and Field, 2014)

One of the first attacks on Mercantilist thought was raised by David Hume with his development of the price-specie-flow mechanism. Hume challenged the Mercantilist view that a nation could continue to accumulate specie without any repercussions to its

international competitive position. He argued that the accumulation of gold by means of a trade surplus would lead to an increase in the money supply and therefore to an increase in prices and wages. The increases would reduce the competitiveness of the country with a surplus. Note that Hume is assuming that changes in the money supply would have an impact on prices rather than on output and employment. At the same time, the loss of gold in the deficit country would reduce its money supply, prices, and wages, and increase its competitiveness. Thus, it is not possible for a nation to continue to maintain a positive balance of trade indefinitely. A trade surplus (or deficit) automatically produces internal repercussions that work to remove that surplus (or deficit). The movement of specie between countries serves as an automatic adjustment mechanism that always seeks to equalize the value of exports and imports Hume (1955) cited in Apolleyard and Field (2014).

Again, Adam Smith on his side attacked the main mercantilists' views and proposed the classical theory of International trade based on the concept of absolute advantage model. According to him stock of human, man-made and natural resources rather than stock of precious metals were the true measure of the wealth of a nation and argued that the wealth of a nation can be expanded if the government would abandon mercantilist controls. In addition, he showed that trade can make a nation better off with making another worse off Mannur (1996). Besides a country should export a commodity that can be produced at a lower cost than can other nations and import a commodity that can only be produced at higher cost than can other nations. However, according to Onkvisit and Shaw (1997) for trade to take place both nations must anticipate gain from it. In other words trade is a positive sum game rather than zero sum game.

Besides, Absolute advantage explains only a very small part of the world trade today i.e. trade between developed and developing countries. Most of the world trade especially trade among developed countries could not be explained by absolute advantage (Salvatore, 2013).

The model of comparative advantage was later articulated by David Ricardo to replace the principle of absolute advantage. According to this model, a country will specialize in

the production and export of the commodity in which it has a comparative advantage i.e. the commodity that it can produce at the lowest relative cost krugman et.al (2012).

As an attempt to modify the classical theory of trade, the factor endowment theory of Hecksher and Ohlin (H-O), of external trade evolved. According to this theory, different products require productive factors in different relative proportions and Countries have different endowments of factors of production. Some countries have large amounts of capital (capital abundant) while others have little capital and much labor (labor abundant).

This theory argues that each country has a comparative advantage in that commodity which uses the country's abundant factor. Thus capital abundant countries should specialize in the production and export of capital-intensive goods while labor abundant countries should specialize in the production and export of labor-intensive commodities.

This theory, which played a predominant role in the early literature of trade theory, encouraged third world countries to focus on their labor and land intensive primary product exports. It was argued that by exchanging these primary products for manufactured goods of the developed countries, third world nations could realize enormous benefits obtained from trade with the richer nations.

As Onkivist and Shaw (1997) noted a country that is relatively abundant in labor but relatively scarce in capital is likely to have a comparative advantage in the production of labor intensive goods and to have deficiencies in the production of capital intensive goods. This concept explains why china a formidable competitor in textile products has to depend on U.S. and European firms for oil exploration within china itself.

Although the factor endowment theory contributed a lot to the modern theory of international trade, the validity of the theory is based on a set of assumptions that are unlikely to hold. Specifically, six basic assumptions of the neo-classical trade model are criticized in explaining trade between the developed and the developing countries Todaro(1994).

Prebisch and Singer (1950) studied the long-term behavior of terms of trade of primary products. They assert that in the long-term the prices of primary products in international markets decline thereby worsening the terms of trade for developing countries depending

on primary exports. This implies an inward looking approach contrary to the classical theory of trade. This theory implies that instead of specializing in the sector with comparative advantage or resource abundance, they should diversify their production in favor of non-primary goods. This notion has been a subject of debate regarding trade and still remains so. There have been a number of empirical studies that try to prove or disprove this hypothesis (Sarkar, 1994).

### **2.1.3. Importance of International trade**

According to traditional trade theory, if each nation specializes in the production of the commodity of its comparative advantage, world output will be greater and, through trade, each nation will share in the gain. With the present distribution of factor endowments and technology between developed and developing nations, the theory of comparative advantage thus prescribes that developing nations should continue to specialize primarily in the production of and export of raw materials, fuels, minerals, and food to developed nations in exchange for manufactured products. With developing nations specializing in primary commodities and developed nations specializing in manufactured products, all or most of these dynamic benefits of industry and trade accrue to developed nations, leaving developing nations poor, undeveloped, and dependent. This belief is reinforced by the observation that all developed nations are primarily industrial, whereas most developing nations are, for the most part, primarily agricultural or engaged in mineral extraction or the production of simple manufactured goods (Salvatore, 2013).

Thus, traditional trade theory was attacked for being static and irrelevant to the development process. According to the above rationales traditional trade theory involves adjustment to existing conditions, whereas development necessarily requires changing existing conditions. In short, traditional trade theory was believed to maximize welfare at one point in time or in the short run but not over time or in the long run (Salvatore, 2013).

Nations trade with each other for fundamentally the same reasons. That is individuals or countries engage in exchange of goods and services in order to obtain the benefits of specialization .since nations like individuals are not equally suited to produce all goods either because of they are differently endowed or for other reasons, all would benefit if

each specialized in what it could do best and obtained its other needs through exchange kreinin(1971).

On the other and Krugman ,et.al, (2012) noted Countries engage in international trade for two basic reasons each of which contributes to their gains from trade First countries trade because they are different from each other .Nations like individuals can benefit from their differences by reaching an engagement in which each does the things it does relatively well. Second countries trade to achieve economies of scale in production .that is if each country produces only a limited range of goods it can produce each of these larger scale and hence more efficiently than if it tried to produce everything.

Besides Arguments in favor of promoting and diversifying exports in low-income countries

Emphasize that exports are special and more valuable than other economic activities. Among the most prominent reasons cited for this point of view are that (a) exports generate scarce foreign exchange, (b) exports, and more broadly international trade, promote growth, and (c) export diversification, particularly into more sophisticated products, such as manufactures, generate strong externalities, which not only raise current growth but significantly enhance prospects for future growth Biggs(2007).

Despite having different reasons for trade, every nation acts as any other economic agent that aims at obtaining the optimal benefit out of its economic activities. This requires the proper identification of their respective potentials in terms of their resource endowments, economic performances and their socio-political state of affairs. Therefore, each country should be aware of what to produce in terms of the opportunity cost compared to the other product. It requires a smart move since the gains from trade are not evenly distributed (Krugman & Obstefeld, 2009).

#### **2.1.4. Trends and growth of world exports**

International trade has grown considerably in recent decades. For example over the period between 1963 and 1979.The rate of expansion in real merchandise exports in the world averaged 11.8 percent per year, a remarkably high growth by historical standards .Similarly global growth in output measured by gross domestic product (GDP) in each country averaged 6.1 also high by historical standards. Thus during that period the world

experienced a rapidly rising effective integration among countries as they become more closely interrelated through international trade in goods. This trend continued after 1979 though the economic activity grew at markedly slower rates. Over the period between 1979 and 1991 real export growth averaged 4.4 percent per year while real output expansion averaged 2.9 percent per year Markuse, et.al(1995). However, for much of the period since 1950 the export performances of developing countries lagged behind that of the developed countries(Thiwall,2003 )cited in paulos (2004).

Similarly, according to the study conducted by Berhanu and Kibre (2001) from the year 1981- 2000, the volume of export in Ethiopia has not shown a clearly visible and sustainable positive trend, except a sharp rise in the second half of the 90s. Considering the five major export commodity groups, namely coffee, pulses and oilseeds, hides and skins, fruits and vegetables, and Chat, which today accounts for over 85 percent of total export earning, the volume of export of each commodity category, except fruits and vegetables, have been fluctuating.

Debel (2002) on his side tried to pin point out the performance of Ethiopian export. According to his study the value of goods and services exported has been growing at an average annual rate of 10.2 percent for the years starting from 1960/61-2000/01. During the period under consideration, the revenue from exports of pulses and oilseeds has been growing at an average annual rate of 59.4 percent followed by chat whose rate was 59.1 percent.

### **2.1.5. Theoretical Review on factors affecting export performance**

Interdependence in the world economy is reflected in the flow of goods, services, labor and capital across national boundaries. In general it would expect nations to trade more with larger nations (nations with large GDP) than with smaller ones, with nations with less open systems and cultural background than with nations that are more different.

In a simple form the gravity model postulates that the bilateral trade between two countries is proportional or at least positively related to the product of the two countries GDP's and to be smaller the greater the distance between the two countries. That is the larger and the closer the two countries are the larger volume of trade between them is expected to be (Salavatore, 2013)

In addition, based on the theoretical model adopted by Goldstein and Khan (1985) of imperfect substitution there was a demand and supply side of factors affecting export performance. Exchange rate, Openness and GDP of major trading partner which are considered as the demand side of the factors affecting export performance. On the other hand GDP of the home country, export credit facility and public investment on infrastructure were considered as a supply side of the factors affecting export performance (Belayneh and Wendaferahu 2013).

The neo-classical economic theory pays special attention to the exchange rate (ER) which is used as a measure of price competitiveness. In addition, the appreciation/depreciation of the exchange rate of the particular country determines the loss/gain of competitiveness on international market (Gose 2009).

Moreover, according to the Marshall-Lerner condition and Mundel-Fleming model, a decrease in real effective exchange rate or appreciation of domestic currency will make exportable items expensive, then the demand for exports in external market is likely to fall and this in turn will reduce foreign exchange. In such a case, the expected sign of real effective exchange rate will be positive. If there is an increase in real exchange rate (Depreciation) the exported items will be cheap and it will be competitive in international market. As a result it will be affected negatively.

Based on available theoretical literature the first three variables in the model are called external (demand side) determinants of export performance. Ethiopia is one of the countries whose export performance depends on overseas economic situation. As the country is a small open price taker economy in the world market World market forces, generally determine the prices of its exports. Hence, the demand for Ethiopia's export in the world market is influenced by fluctuations in developed countries income particularly that of our trading partners. That is, all other things remain constant; an increase in the real GDP of Ethiopia's major trading partners, which is denoted by  $Y^*$ , either due to the output growth of our major trade partners, liberalization measures, or diversification measures increases the demand for our product and hence increase Ethiopia's export earnings.

As reviewed in the literature part, the impact of openness is also ambiguous. Some scholars strongly acknowledge that the more open an economy to the external world the higher will be its foreign exchange earnings from export. The implication is that a country needs to integrate to the world market by diversifying its trading partners. The degree of integration of a country to external market is thus measured by openness to trade, which is proxied by the sum of exports and imports of goods and services to GDP ratio. Thus, an increase in the ratio of exports and import of goods to GDP implies better integration of Ethiopia to the external world and hence higher export performance. In short, an increase in openness will have positive impact on export performance. However, if openness leads to shocks in the goods market that declines in export demand, it will decrease exports performance.

On the other hand, the fourth, fifth and sixth variables are regarded as internal (supply side) determinants of export performance. The inclusion of real output in the model is based on the argument that the output capacity of an economy is an indication for future supply capacity. Thus, an increase in output will enhance export performance. Economic theory also strongly acknowledges that the quality of infrastructure is one of the key determinants of export performance. Infrastructure (road, power, communication, etc) development, which is the key determinant factor for the flourishing of any industry especially export sector is proxied by the ratio of public investment on transportation and communication to GDP. Therefore, expanding infrastructure density of various types with an acceptable level of quality or the increase in public investment in infrastructure to GDP ratio in Ethiopia will have positive impact on export growth. That is, the expected sign of public investment on transportation and communication is positive.

Amin (2007) on his empirical study suggest that there is a strong positive relationship between a cut flower export and the export credit. According to him since the industry need huge finance the business is impossible without credit facility by banks and would not have registered such a wonder full result. Therefore, private sector credit as a ratio of GDP by the banking system is added as an independent variable in export performance model in order to examine whether there is a friendly credit access by banks to country's export performance. In this case, the impact of on exports is positive.

## **2.2. Empirical Literature**

### **2.2.1. Export promotion and diversification efforts in Ethiopia**

#### **A. Pre 1991/1992**

According to ((Berhanu (2003) Nega ( 2013) wendmhunegn ( 2011)) the policy adopted in the pre-1991/92 period both in the Imperial and Military government of Ethiopia was characterized by strongly inward-oriented development strategy, which used a prolonged over valuation of the Birr, high tariff rates, extensive foreign exchange control and other non tariff barriers as well as heavy taxation on exports. These policies are likely to have a detrimental impact on export by influencing directly or indirectly the profitability and competitiveness of exports.

Even though both previous government of Ethiopia were commonly pursuing import substitution strategy and export sector was secondary for them in their economic development plans, it doesn't mean that they didn't make any effort to promote and diversify the country's exports. They made effort to promote exports and diversify the entire export commodities as shown in the three different five-year development plans of the Imperial Government of Ethiopia (IGE) and in the Derge's ten year perspective plan. The first five year development plan (1957/58-1962/63) gave priority to import-substitution industrial promotion and infrastructural facilities like road development while it gave minor attention for export promotion.

The second five-year development plan stated the export sector to rely mainly on traditional export products such as coffee, hides and skins, oil seed and pulses and others. It also stipulated an important role to be played by new export products of industrial origins and mining products. In this process, exports were expected to attain a larger degree of diversification in which semi-manufactured and manufactured industrial goods would play an increasing role. Such a move would facilitate the expansion of the country's export through strengthening their world markets acceptance and competitiveness and greatly contribute to the improvement of the already affected terms of trade and balance of payment status of the nation. This plan also set the share of agricultural exports to exhibit a decrease from 93.6 percent in 1962/63 of the total export

to 72.3 percent in 1967/68 while the share of manufactured products was planned to increase from 5.2 to 24.2 percent during the same year.

To implement this plan, incentives like profit/income tax holidays, export trade licensing Simplification, restructuring and strengthening of chamber of commerce, establishment of trade attaches in Ethiopian Embassies and missions all over the world, and provision of market study trainings were offered for investors who engage themselves in the production of non-traditional export items.

The third-five year development plan (1969/70-1973/74) gave a great deal of attention for foreign trade in general and for the export sub-sector development through diversifying variety of export items in particular. In this plan period, agricultural product exports were expected to decrease to 75 percent in 1973/74 from that of 86 percent in 1967/68. Through the addition of new agricultural products in the export basket, the share of coffee was envisaged to fall from 55 to 40 percent at the end of the plan period.

In order to increase the exports of manufactured item, special emphasis was given for the strengthening of hides and skins processing. The plan also stipulated diversification of exports mineral products such as potash, gold and others. It was believed that such a move would help the country realize balance of payment improvement. During the plan period, export was envisaged to double with reduced cost of production and improved quality. In addition the plan stipulated a three-fold increase in non-agricultural exports such as textiles, wood products, building materials, non-metallic products and chemical industry products. To implement the plan, the then existing system of duty draw back on direct raw materials and other components of export product was revised. In addition, both fiscal and monetary incentives were offered for both domestic and foreign investors engaged in export-goods production.

In a net shell, in spite of their attempts in all the three development plans of the Imperial Government of Ethiopia, this didn't bring the anticipated export promotion and diversification.

The military government who came to power in 1974/75 under took a ten-year perspective plan of 1985/86-1994/95. The main objective of the plan was to orient the

country's export structure towards manufactured products from the already existing primary exports of agricultural product, to expand substantially the country's foreign exchange earnings through exporting diversified industrial, mining and agricultural products and to diversify export markets and reduce over dependence on traditional ones. To summarize, despite the measures taken by both the Imperial and the Derge regimes to diversify the export basket and promote exports, the Ethiopian export products remain undiversified and are still concentrated on very few primary products like coffee, hides & skins oil seeds & pulses and chat. This is because both regimes used overvalued exchange rate, high rate of tariffs and other trade restrictive commercial policies that developed strong anti-export bias, and strongly in-ward oriented trade policies favoring import substitution than export promotion. Although export promotion incentives like export subsidy and others were provided, these have neither resulted in the export diversification nor in the expansion of the existing export volume. This was so because the incentive provided were not enough to counter-balance the anti-export-bias caused by currency overvaluation, high duties.

#### **B. Post 1991/1992**

In 1991, the transitional government of Ethiopia and in the latter time the Ethiopian Peoples' Revolutionary Democratic Front (EPDRF) together with the IMF and the World Bank has undertaken liberalization and structural adjustment program to address the internal and external imbalances of the economy. In particular trade policy reform was undertaken which aimed at promoting exports through diversifying the country's commodity exports.

Several policy measures such as Devaluation of Ethiopian birr, revision of tariffs, tax amendment, simplifying import and export licensing system, duty drawback scheme, foreign exchange retention scheme, preferential interest rate scheme, establishment of institution like the Ethiopian export promotion a agency were undertaken to diversify and promote Ethiopian export

As a result of the above export trade policy reforms a remarkable increase in export volume and earning was realized as compared with the performance envisaged pre 1991/92.

Menjii(2010) on his part noted that real merchandise and manufacturing exports has been steady improving during the periods1980-2008.But with ups and downs during 1980-1998.The countries total merchandise export reached a value Of 1.16 billion dollar in 2008 from a value of 347 million in 1981 showing an average growth rate of 7 percent per annum. Manufacturing exports in Ethiopia has also increased from dollars 70.97 million in 1981 to 92.3 million dollar in 2008 revealing an average growth rate of 4 percent.

## **2.2.2. Determinants of export performance**

A remarkable performance on export depends on many factors. Gross domestic product, foreign direct investment, Exchange rate, infrastructure development, openness of the economy and indirect taxes (duty) and other factors are considered as the factors that determine the performance of export. Accordingly, their empirical explanations are determined as follows.

### **2.2.2.1. Gross Domestic product**

Many empirical studies have conducted in the area of exports to determine its performance. A comprehensive study was conducted by Fugazza(2004) and was used panel data for 84 countries for the periods 1980-1999.The researcher was used export performance as dependent variable and Gross domestic product as an independent variable and GDP was founded to have positive and a significant impact on export performance. On the other side, bilateral trade flows between two countries are assumed to be proportional to the level of their gross domestic product. The GDP takes in to account that higher income economies tend to be more interested in product differentiation and specialization as a result they trade more(Fujima and Edmonds,2006) cited in Yaghoob & et.al(2011).

In a similar fashion YISHAK (2009) cited in nega (2013) analyze determinants of export performance of Ethiopia. A gravity model is employed with panel data using 30 Ethiopia's trading partners for the period 1995–2007. The model is estimated with the Generalized Two Stages Least Squares (G2SLS) method. Accordingly he found that GDP affects Ethiopian exports positively.

Agasha (2006) used VEC model to analyze the determinants of export growth rate in Uganda. The researcher used quarterly data from 1987 – 2006. The researcher estimated export growth rate as a function of Gross Domestic Product, and other determinants of export trade. The results from the long run co-integrating regression revealed Gross Domestic Product to affect export growth rate positively. Belayneh and wendaferahu (2013) on their part have conducted using an econometric model for the periods 1970/71-2010/2011 on the determinants of export performance. They used a long linear form export determination model and employed both supply and demand of related variable. The result for the impact of GDP on export performance was positive and this was consistent with Majeed and Ahmed (2006) in estimating developing countries export. The fact was output capacity of an economy has an implication of supply capacity by maintaining a countries competitiveness in the international market in the long run. Kumar (1998) cited in Nega (2013) conducted a study on the determinants of export growth in developing countries and confirmed that real GDP has a significant positive impact on export volume. He further said higher production level is the main cause of export expansion since surplus output can be exhausted in the international markets.

The gravity model also explained the empirical evidence conducted in US by taking the top 15 trading partners of European countries to US. According to the study there is a strong relationship between the size of countries economy (GDP) and the volume of both imports and exports. By observing the world trade as a whole economist have found an equation which enable to predict the volume of trade between two countries fairly and accurately

$$T_{ij} = A * Y_i * Y_j / D_{ij},$$

Where A is a constant term, is the value of trade between country i and country j, is country i's GDP, is country j's GDP, and  $D_{ij}$  is the distance between the two countries. That is, the value of trade between any two countries is proportional; other thing equal, to the product of the two countries' GDPs, and diminishes with the distance between the two countries (krugman, etal.2012). Hence from the above reviewed empirical literatures GDP is expected to affect export performance positively.

#### **2.2.2.2. *Openness of the Economy***

Opening economic policies to trade and investment with the rest of the world is needed for export growth. This is because in recent decades there is no country achieving economic success without liberalizing itself to the rest of the world. Hence, Trade liberalization has generally taken place in LDCs as part of the structural adjustment program. Ethiopia has taken many measures to liberalize its economy since the fall of Derg. Trade liberalization implies considerable reduction in tariff and non-tariff barriers, so as to establish a noticeable open market as compared with the pre- liberalization era UNCTAD (2004).

Theoretically, trade liberalization is the reduction of official barriers to trade that distorts the price of tradable and non-tradable goods and services. Its practical overall measurement, however, is difficult. One of the reasons, being it is rarely the case that all distortionary policies are identifiable. In addition, it is not well known how the promised policy changes have actually been implemented (winters, 2000)

Roderik (2000) defined trade liberalization as the reduction of both tariffs and nontariff barriers to trade. In fact there are three variables that are used as alternatives to capture the degree of openness of the economy. These are Import to GDP ratio, Export to GDP ratio and Export plus Import to GDP ratio (Chelliah 1971). Then the increase of the two is considered as the result of the fall of trade barriers. The problem with this method of measurement is both imports and exports are determined simultaneously with other variables (Koujianou et al, 2004).

With liberalization of the economy, the sectors in home countries have a comparative advantage in which they can export their products to the rest of the world, while the import competing sectors face foreign competition. Hence, the empirical researches focusing on the impact of trade liberalization (openness) on export earnings revealed mixed results. For example a literature conducted by (Ahmed, 2000) exhibited that countries which get on liberalization programs have improved their export earnings. Similarly, Seyyed et.al (2011), using panel data evidence for 19 countries found that open trade policy enhances GDP and export growth. Similarly, According to (Winters ,2000), though there are some critics on policies of trade liberalization/openness in improving

welfare, there is a general consensus that in the long run and on average, open economies contributes to long run development. In the short run, trade liberalization might exert pressure on certain sectors, and might even endanger some group of the population by aggravating poverty.

However, Giovani and Levencko, (2007) argue that increased trade openness has contributed to rising uncertainty and exposed countries to external shocks and hence, adversely affects country's export.

Agosin, et. al. (2009) used 40 years data on 130 countries to estimate the determinants of export diversification. They use two-step GMM estimation on three groups of explanatory variables. The first group of variables includes reform related ones like trade openness and financial sector developments. The second group of variables includes structural determinants of exports like factor endowments and distance. The third group consists of macro-economic factors that affect exports like exchange rate volatility, terms of trade, interaction of human capital with terms of trade. They find that trade openness encourages specialization and therefore is negatively related to export diversification.

Hence, Ethiopia as members of the LDCs has taken a structural adjustment up on trade liberalization / openness /of the economy to promote export performance and trade bilateral relationship with the rest of the world.

### **2.2.2.3. Foreign Exchange Rate**

Traditional view generally assumed that the exchange rate depreciation would stimulate exports and restrain imports, while appreciation of exchange rate would discourage exports and encourage imports. However, according to an investigation paper, T. Abeysinghe and T. L. Yeok (1998) such conclusion often neglects the existence of large amount of import contents in exported products, as well as the dynamic effects of productivity improvements on export. The same study reveals that the exchange rate appreciation does not adversely affect exports of Singapore because exports possess high import content.

The performance of the country's exports highly dependent on its exchange rate regime and more specifically the real exchange rate .various studies have shown that the demand

for the country's exports increase when its export prices fall in relation to the world prices. The depreciation of its currency compared to other currencies particularly, the dollars makes its exports cheaper on the international market. For example Sharma (2001) discovered that the demand for Indian exports increased when its export prices fell. He also said that the appreciations of the Indian rupee at one time adversely affected Indian exports. It is further argued that a competitive exchange rate is associated with export growth. In Tanzania, a time series study on non-traditional export (NTE) found a statistically significant relationship between real devaluations and export growth of NTEs (Berhanu, 2003). However, the study conducted in Uganda on the investigations of the impact of trade liberalizations on export volumes by Kasekende and Atingi-Ego (1999) found no significant relationship between real exchange rate and export volumes.

#### **2.2.2.4. Foreign Direct Investment**

Despite the controversies surrounding the benefits and cost, FDI likely affects export performance positively in developing countries. The experience in a number of countries suggests that FDI strongly contributes to the transformation of the composition of exports. For example, the FDI inflows into Singapore, China, Lesotho, Madagascar and Mauritius, have contributed to the increment of technological content of their exports by supporting the development of knowledge-based industries. This positive and significant relationship between export performance and FDI has contributed to capital formation. FDI does contribute to the technological upgrading, and then is expected to be directed towards innovative activities within an already existing sector, and in that sense it stimulates essentially intra-sectoral rather than inter-sectoral diversification UNCTAD (2005). Similarly, Foreign interest in a local firm and export activities are expected to have a positive relationship mainly because of the multinational's (MNE) access to superior production, technology and management know-how which the local firm can acquire (Teresa and Caparas (2006)

Further, MNEs have sophisticated international networks which facilitate the exporting process. An empirical research conducted by Shenk and Theeuwes (2002) cited in Skosan and Kabuya (2014) reveals on the determinants of export performance of Netherland. The study found a positive relationship between inward foreign direct investment and

Dutch export performance. This was because of the fact that the Dutch resident companies owned by foreign companies tend to export more than the locally owned companies do.

In the theories of FDI, two types of production arrangement are known to exist in Multinational companies. Vertical integration (Help man,1984) and Horizontal integration(Horst man and Markusen,1992).Vertical integration is likely to facilitate trade by increasing exports of capital equipment and factor services from the home country, and exporting resources based products from the home county. Horizontal integration is a substitute trade, given that Multinational companies have shifted their production for exports from their home country to the host country.

Nevertheless, the existing empirical evidence on the effect of FDI on exports is mixed. Some cross country studies indicate that international trade and FDI are substitute and negatively correlated (Horst, 1972, Jeon, 1992).While others find that they are complementary to each other and are positively correlated (Grosse and Trevino, 1996). In addition according the research conducted in Ireland (O’Sullivan 1993) FDI plays an important role in export performance.

In the case of Ethiopia where export –oriented FDI is actively encouraged and various incentives have given for foreign investors who invest domestically, the level of FDI will likely promote export performance. Hence FDI is expected to affect export performance positively.

#### **2.2.2.5. Indirect Tax**

Using panel data ranging from 1970 to 2004 for 75 developing countries Majed and Ahmed (2006) attempted to examine the determinants of export performance. They used an export equation with a model specified in explanatory variables such as FDI, GDP, growth rate, real effective exchange rate, indirect taxes and labor forces. They tried to see the effect of indirect tax and were expected to be an adverse in the production decision. However they could not rule out the possibility of positive effect on exports due to the fiscal incentives by government. This will happen for governments that provides tax exemptions for the expansion of export sector. However, higher rate of indirect taxes can

have a negative effect on export performance. Besides; the effect of indirect tax in Ethiopia pre-1991/92 is expected to affect export performance negatively. The justification is pre-1991/92 there were no as such export promotion incentives. However, post 1991/92 there was a tremendous effort to promote export. One of the promotion mechanisms was the exemption of indirect taxes. As a result it this variable will be expected to affect export positively.

### 2.2.3 Elements of Export Marketing Strategies

In the international marketing research, scholars have applied several dimensions to indicate marketing strategy as export marketing strategy or business strategy.

However, all of these dimensions based on marketing mix and some scholars add few variables in order to make it more meaningful (Abdul Adis, Md. Sidin, 2010) cited in Melsew(2014). Especially in export marketing strategy, Mohamad, (2009); Brodrechtova, (2008); Lee and Griffith (2004); Leonidou et al., (2002) cited in Melsew(2014) had explained that the export marketing strategy elements are product, price, promotion and place.

To address the specific objective saying to assess the export marketing strategies the study defined conceptually only the marketing mix elements which consists of product, price, distribution and promotion.

#### 2.2.3.1 Product marketing strategy

The product dimension is an important part of marketing mix that influence export performance.

A product can be defined by its features such as the physical core (design, quality, color, size, style and presentation), the packaging (branding, labels and trade marks) and the auxiliary services (warranties, spare parts, after sales services and user instructions). Hence export performance can be affected by the way firms adapt various

components of their products in line with the specific needs of the targeted markets (Cavusgil and Zou 1994).

Adaptation can be mandatory which means that any failure to do so means zero export sales in certain markets as the product fails to perform its function (Onkvist and Shaw 1997).

According to Leonidou, et al (2002) an empirical study on the relationship between marketing strategy and export performance concluded that product design, brand mix (name, sign, symbol and design), warranty, customer service as pre and after sales services and product importance (such as luxury, prestige and quality) had a positive relationship with export performance.

Moreover, Cavusgil and Zou (1994) cited in Jullian and Ocass, (2002) investigated an empirical link between marketing strategy and export performance with in-depth personal interviews with export managers. They concluded better export performance could be obtained via adapting the product to meet the requirements of export customers.

Therefore, product adaptation has a positive effect on export performance.

### **2.2.3.2 Price marketing strategy**

Price is another part of marketing mix that many researchers assessed in their study and it is one of the most important items in the international market to compare with their rivals but Lee and Griffith (2004) noted that in today's competitive international marketing focusing only on the decrease of manufacturing costs might no longer cause the company's success in export driven economies. Elements of price which includes the actual price level, the use of credits, discounts and margins.

Export profitability can be improved by adapting a pricing strategy in line with the demand conditions, competition, legal and political environment prevailing in the targeted market (Lages and Montgomery 2001).

Lages et al., (2004) studied about European perspective determinants to discuss the main antecedents of export performance based on perception of Portuguese and British export managers. The percentage of the main export performance determinants is very similar and their findings showed that price competitiveness is one of the main determinants of export performance.

Similarly, Lee and Griffith, (2004) in their study about the marketing strategy-performance relationship in Korea concluded that adjustment of export prices to foreign market situation have positive influence on the performance of exporter and adaption of pricing strategy would increase the performance of export.

However, the concept of price competitiveness (relatively lower price) has produced mixed results in empirical studies giving three different sets of contradictory findings. The first set of studies (Bilkey, 1982, 1985) cited in marandu (2008) found that export price competitiveness and performance are negatively associated. Specifically, Bilkey found that charging a high export price as compared to domestic price was positively correlated with export profitability. The second set of studies (Kirpalani & MacIntosh, 1980; Fenwick & Amine, 1979; Khan, 1978)cited in marandu(2008) found a positive relationship between price competitiveness and performance. The third set of studies (Moser & Topritzhofer, 1979, as quoted in Madsen, 1987; Hirsch, 1971)cited in marandu(2008) did not find any association.

### **2.2.3.3 Promotion marketing strategy**

Promotion is one of the marketing mix that many researchers assessed its relationship with export performance to find whether sound promotion would increase sales and export performance. Export performance might be in the form of advertising, personal selling, sales promotion and public relations.

According to Madsen (1987), personal contact is the single most important element of export promotion policy, because it is an efficient way of overcoming buyer uncertainty and cultural differences.

From all dimensions of export performance, the most widely researched was advertising that examined advertising procedure the company can inform, introduce, remind or encourage consumer and, therefore, generated more sale and enhance export performance Leonidou et al.( 2002). The importance of advertising on export performance is recognized from higher sales of firms that used sound advertising and higher performance result for exporter who have a greater commitment to their target market that use higher level of advertising rather than firms who have less commitment that use low level of advertising (Lee and Griffith, 2004).

In relation to promotion the commercial branch in export market had positive and significant relations with export performance.

According to Leonidou et al., (2002) cited in melsew studied about marketing strategy of export performance: a meta-analysis with reference In the review of studies, they divided the promotion related variable to advertising, sale promotion, personal selling, trade fairs, personal visit, and promotion adaption and conceded that all these variables have positive influence on export performance. Advertising was the most widely researched was found to have positive relation with financial and nonfinancial or composite measure of export performance. Sales promotion including coupons, samples, premiums, and other promotional tools is useful in low-income economies or market with advertising restrictions and high competition. Personal selling is used in markets that have restrictions on advertising or the cost of managing a sale force is low. Trade fair improves export performance because sale potential of specific export market to be tested, new firm for distribution or other collaboration in foreign market to be found, and it can used for market research purpose. Personal visit can increase export performance because it enhances experience about problem or opportunities, personalizes relationship, increases communication, and provides timely response to export venture's need. So, they concluded that promotion is associated with performance positively and firms can be more successfully in international market with more intensive use of promotional tools.

#### **2.2.3.4 Place marketing strategy**

Distribution comes in the form of physical distribution, support to channels and out lets, channel management and relationship building.

Customers need to have their request in export market easily and on time and, therefore, place is one of important export marketing strategies that firms pursue recently. Lages et al., (2004) has studied about European perspective determinants to discuss the main antecedents of export performance based on perceptions of Portuguese and British export managers. They revealed that distribution network becomes determinants of export performance.

Similarly, Lee and Griffith (2004) explained that exporter channel strategy was imagined as the degree to which a firm applied direct instead of indirect channels for export its products and it is evaluated by gathering the ratio of direct exports to local distributors, retailers, and producer in whole exports. They concluded that direct exporting channel would affect export performance positively. In this research, it is very important to identify the effect of direct exporting on export performance because many of these companies have not exported directly.

#### 2.2.4 Export entry strategy

Entry strategy is the method used by a company to start doing business in a foreign country Shama,( 2000). Entry strategy is an institutional arrangement that makes possible the entry of firm's products, technology, human skills, management, or other resources into a foreign country Karkkainen,( 2005) cited in (Sadaghiani et al,2011).

Many forms of market entry strategy are available to firms to enter international markets. One classification first distinguishes between equity and non-equity modes. Equity modes involve firms taking some degree of ownership of the market organizations involved, including wholly owned subsidiaries and joint ventures. Non equity modes do not involve ownership and include exporting or some form contractual agreements such as licensing or franchising Wilkinson and Nguyen,( 2003) cited in (Sadaghiani et al,2011).

#### 2.2.5 International marketing information

In the international marketing system information is the most decisive factor to make the marketing process effective and efficient. Number of authors studied in the field of marketing argued that global marketing management needs to be implemented based on valid: reliable, timely, verifiable and high-quality marketing information, which will enable valid decision-making in global business operations. The efficiency and effectiveness of decision-making is directly related to considering the comprehensive state of the chosen segment(s) of the global market. Informational completion of the picture of a market requires devising and implementing a large number of activities set in a logical sequence. Practical experience has shown that decision-making in managing

global business activities of affirmed companies is based on accumulated knowledge and is regarded as a specific form of creativity, unlike operationalization and supervision, which are mostly organizational and technical issues. Bearing this in mind, the informational basis in the operation of global companies should be viewed in accordance with its significance and function in global marketing management (Gruber, 2010).

Douglas & Craig (1983) cited in Grubor(2010) strengthened his argument that “Market information is therefore the key constituent of designing an efficient global marketing strategy in operating on the domestic and especially global market, as well as being an essential part of corporate decision-making process Marketing research is undoubtedly one of the key methods of gathering reliable, timely and verifiable market information. Gathering and interpreting such information requires appropriate expertise and practical skills of involved staff, so that gathered information can be presented to decision-makers in a high-quality manner.

#### 2.2.5.1 Impact of market information

According to Grubor(2010) One of the vital reasons for business failure on the global market is the lack of information on the target market. It is, therefore, about inadequate understanding of global marketing environment factors, like competitors, demographics, economic environment, legal aspects, public policy, resources market channels, income of the customers, materials, and production technologies and human resources. Raising global corporate management’s level of knowledge of all relevant global marketing environment factors is an imperative in the contemporary management of global corporate operations. In relation to this, one can also speak of a special type of global marketing management, the so-called information global marketing management, which relies on gathering and selecting objective information. Based on gathered information, a global business may conduct comprehensive market, i.e. marketing intelligence at all management levels,

Through:

- strategic intelligence, i.e. viewing the overall issues of global business operations, such as those of global distribution, pricing, attaining adequate product quality etc.;
- Tactical intelligence, required by middle management executives; and
- operational intelligence, required for the steady conduct of daily activities.

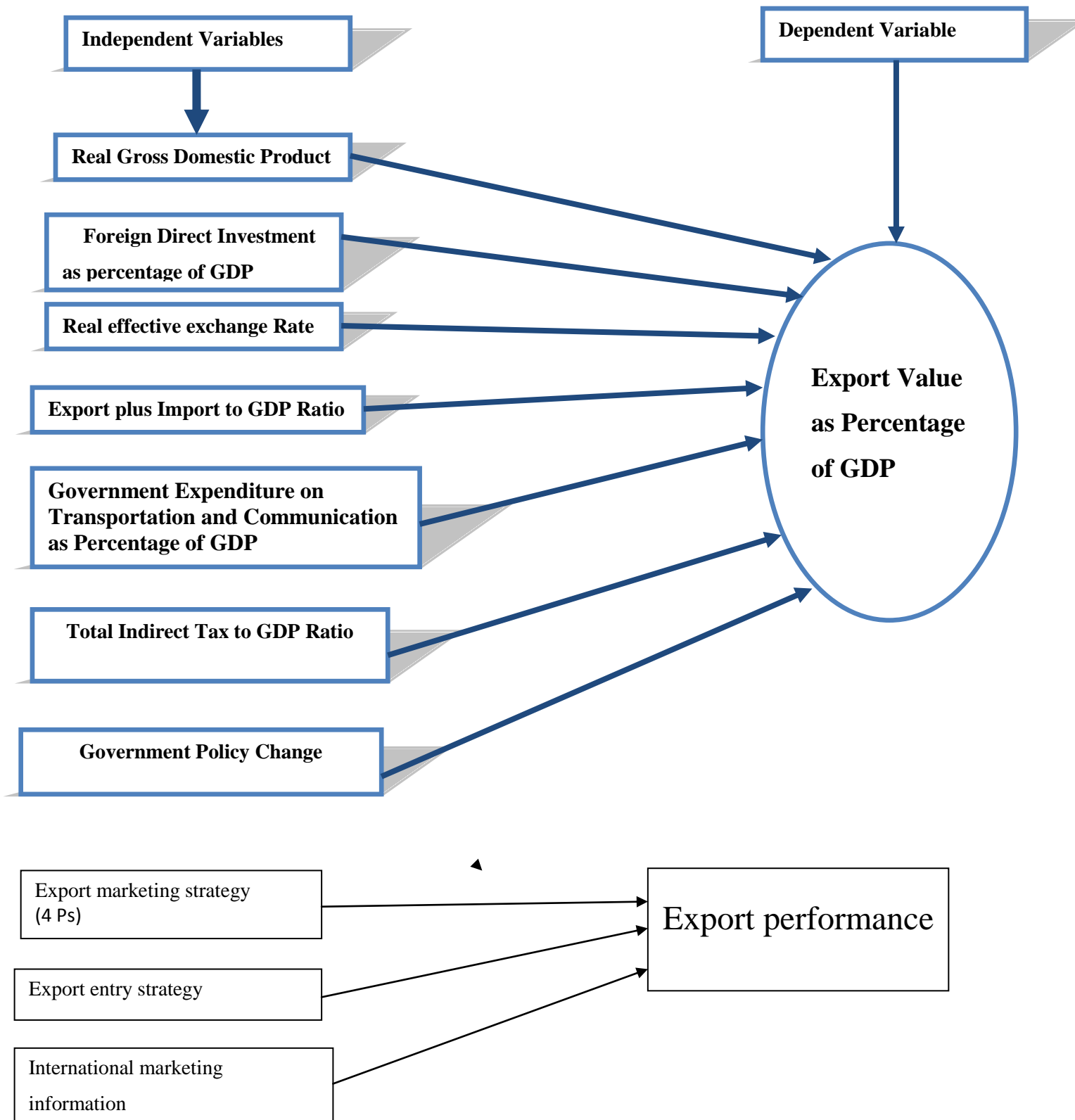
Information can therefore; play different roles in the decision-making process related to a business's global activities.

### **2.3. Conceptual Framework**

Based on the theoretical and empirical explanation provided by the previous studies such as Majeed and Ahmed (2006), Skosan and Kabuya (2014) and Drama et al. (2014) the conceptual framework of the model will be developed in the figure below. It will show the relationship between the dependent variable indicated by export volume as a percentage of GDP and independent variables, which includes Macro-economic, and Government Policy changes. The Macro-economic variables incorporate Gross domestic product (GDP), foreign direct investment, Real exchange rate, Infrastructural development, openness of the economy, and Indirect taxes.

As it is indicated below diagram, the left hand side shows the independent variables together with their indicators. While the right hand side show the dependent variable.

**Figure 2.1 Conceptual Framework Regarding Macro and micro variables**



**Source: Elaborated by Author**

## **CHAPTER THREE**

### **3. RESEARCH METHODOLOGY**

This chapter mainly focuses on research approaches and the research method that follows to address the main objectives of the study. In addition, it also covers the specified study, the types and sources of data, method of data analysis and presentation and wind up with model specification and testing procedures.

#### **3.1. Research Approach**

Since the objective of the study is to identify the macro economic factors that affect export performance in Ethiopia as well as assessing the export marketing and entry strategy and international market information, the overall data required to address the objectives involve both quantitative and qualitative nature. Specifically time series data for selected macro variables are required to conduct this research. So, as it is noted by Muiji(2004) this research approach involves collecting numerical data to explain a particular phenomenon investigation. In addition, to answer the research objective with regard to the micro variables, qualitative data is needed. Therefore, both quantitative and qualitative research approaches are appropriate for this study.

#### **3.2. Research method**

Among the quantitative research approaches, correlation research method is used in this study. As it is asserted by kumar (2011), correlation research involves discovering or establishing the existence of relation or association between two or more phenomenon. Accordingly, this study used correlational research method to examine the factors that affect export performance in Ethiopia.

Furthermore, the descriptive research method is employed to address the first and second specific objectives that deal with assessing the export marketing and entry strategies as well as international market information, and analyzing the overall export policy reforms, trends and composition of export of the country. Because, these two objectives do not involve establishing relationship and exploring new things instead simply it describes or

assesses the existing information about the export marketing strategy, export entry strategy and international market information and the export policy reforms, trends, and composition of export using percentages, averages, growth rate and nominal values through graphs and charts. Therefore, descriptive research method is appropriate to address these objectives.

### **3.3. Study Period**

This study involves a time series study for the period of past 41 years (From 1974/75-2014/15). This sample period is appropriate and enough to make valid regression analysis. This is due to the fact that, during these periods the economic structure was changed from various economic systems to a free market economy. Various governments applied various export reforms to promote and diversify the performance of export. Therefore, it is plausible to identify the main macro economic factors that affect the export performance of the country. Further more the result of this study is used to articulate policy recommendation that supports the government in promoting the performance of export.

### **3.4. Types and sources of Data**

The study used both primary and secondary data types collected from export companies and export associations and different government agencies such as ministry of finance and economic development (MOFED), National Bank of Ethiopia (NBE) and Ethiopian Revenue and Customs Authority (ERCA) annual published and unpublished reports. In addition, due to non availability of FDI data on Ethiopian governmental sources especially the FDI data of the derg regime is obtained from UNCTAD.

### **3.5. Techniques of Data Collection for Primary Data**

Of course, most of the data to answer three of the research objectives is obtained from secondary data. However, there is also primary data that is useful to answer one of the research objectives. Here, to dig out the information about the export entry strategy,

export marketing strategy and availability of international marketing information, structured and unstructured interviews are employed. As the researcher has an experience on the export sector, it is strongly believed that data can be better extracted through interview to export managers. This is because, if questionnaire is used it is likely that there will be significant non-response rate as most of the exporters are busy and they might not give attention to questions in paper. Therefore, to genuinely extract the information, both structured and unstructured interview is conducted by selecting Ten potential export companies'. These potential companies are selected purposively and considering various sectors.

### **3.6. Method of Data Analysis and presentation**

#### **3.6.1. Method of Data Analysis**

To analyze the data both descriptive statistics and inferential statistics or Econometric application are used. Descriptive statistics is used to analyze the trends and composition of export using ratio, growth rate and averages by depicting graphs and charts. It also used to examine the characteristics of both dependent and independent variables using mean, minimum, maximum and standard deviation. Besides data reduction method of analysis is used with regard to marketing strategies. This is because in the literature it is believed that data reduction method is suitable for information derived from qualitative methods such as interviews.

While, inferential statistics such as multiple regressions, correlation coefficients, coefficient of determination, and other relevant time series test stated in the model testing section is used to address the stated objectives. Among analytical tools, EViews 9, which is appropriate for time series econometric analysis, is used to produce the outcome of the regressions and tests conducted to ascertain the validity of the model.

##### ***3.6.1.1. Techniques of Estimation***

To analyze the long-run relationships and dynamic interactions among the dependent and independent variables, the model is estimated by using Bound testing (Autoregressive Distributed Lag Model (ARDL)) approach to co integration. ARDLs are standard least squares regressions, which include lags of both the dependent and independent variables

as repressors. This model is developed by Pesaran and Shin (1997) and further extended by Pesaran & et al. (1999) and (2001). It is widely applicable to test the existence of the long run relationship among the variables. This method of estimation is chosen because of four reasons. First, relatively it is appropriate for small sample size. Second, it is superior than the traditional Johnson approach to co integration as it enables to establish long run relationship irrespective of whether the variables are integrated at order zero (I (0)) or one (I (1)) or mutually co integrated. Third, it also facilitates to estimate both the long run and error correction model easily and to include dummy variables in the co integration test process. The last but not the least, unlike other methods of estimating co integrating relationships, the ARDL representation does not require symmetry of lag lengths; each variable can have a different number of lag terms. The procedure of this aAs it is explained by these authors assuming two variables the ARDL has lag order of (p, q) where “p” is the lag length for the dependent variable, while “q” is the lag length of the explanatory variables and lag length of the these variables selected using Schwartz Akaike information criterion (AIC). Once the order lag of the ARDL will be selected by SIC, then bound test is conducted and the bound test F- statistics will be examined against the critical value provided by these authors.

The bound test examines against the null hypothesis ( $H_0$ ) indicating that there is no long run relationship among the variables and the alternative hypothesis ( $H_1$ ) implying that there is a long run relationship among the variables. At a given level of significance, if the bound test of F-statistics is greater than the upper bound [I (1)], the null hypothesis is rejected, if it is below the lower bound [I(0)], all the variables are integrated at order zero and the null hypothesis cannot be rejected. In addition, if it is in between the lower and upper bound, the result is inconclusive and it requires further re specification of the model.

Once the bound test ascertains the existence of long run relationship between the dependent and independent variables, the long run and short run model is estimated, and post estimation test followed to confirm the validity of the ARDL estimates for inferences.

### 3.6.2. Model Specification

Based on the studies conducted by Mejeed and Ahmed,(2006), Skosan and Kabuya(2014) Agosin(2007) Drama,et al(2014) in developing and SSA countries, potential factors that are theoretically and empirically supported and expected to have significant effect on export performance are considered in the study. Macro Economic variables such as gross domestic product, real exchange rate, foreign direct investment, infrastructural development, openness the economy, and indirect taxes are considered to examine their effect. In addition, dummy variable that captures the policy and regime changes are also incorporated in the study.

The description of these variables along with their expected outcome is explained as follows:

**Dependent Variable:** The export performance measured by the export to GDP ratio shows the relative success or failure of the efforts of the country to sell domestically produced goods and services across various countries is used as a dependent variable of the model.

#### **Independent Variables:**

- A. **Real Gross Domestic Product:** this variable is the best way to measure the economic activity of a country. Therefore, GDP is expected to have a positive effect on export performance from the fact that the increase in domestic supply holding other factors constant creates surplus for export.
- B. **Foreign Direct Investment:** Is an investment by a company in one country in to investment in another country. Despite the controversies surrounding the benefits and costs, FDI likely affects export performance positively in Ethiopia due to the fact that most of foreign investors produce exportable items and represented by foreign direct investment as percentage of GDP
- C. **Real Effective Exchange Rate:** which shows the relative price of a countries currency is also another important factor that affects export performance of the country. This is because devaluation in exchange rate makes Ethiopian products

cheaper in the international market and thereby it is expected to have a positive correlation with export performance.

- D. **Infrastructure Development:** Better infrastructural facilities make products to supply at minimum transportation cost and it results the home country products competitive in the international market. Hence, it is expected to have a direct effect in the country's export performance. Due to non-availability of adequate data this variable is only indicated by Government Capital Expenditure on Transportation and Communication as percentage of GDP was used as a proxy for infrastructural development.
- E. **Openness of the Economy:** Openness of the economy shows the degree of liberalization to international trade. As a result openness of the economy uses import plus export as GDP ratio as a proxy variables and it is also expected to inversely relate with the dependent variable.
- F. **International trade taxes:** These are the tax levied on import and export items. This can increase the price of a product so that consumers are adversely affected and make export products expensive in the international market. However in the case of Ethiopia especially after 1991/92 there is tax incentive schemes so as to promote export. Accordingly this variable which is indicated by trade taxes as percentage of GDP expected to have a direct relationship with export performance of the country.
- G. **Policy and Regime Changes:** Policy change is a major change in attitude or principle where as regime change is the replacement of one regime with another. In Ethiopia various policy changes with regards export have been made to promote export. In addition, the regime change is also another factor to indicate the export performance. Hence both of the two in the Ethiopian context are expected to have a positive effect on export performance.

Provided this description of the variables and expected outcome, mathematically this study used a double-log linear function to estimate the coefficient of the explanatory variables and it is depicted as follows:

Provided this description of the variables and expected outcome, mathematically this study used a linear function to estimate the coefficient of the explanatory variables and it is depicted as follows.

$$LNEXGDP = \beta_0 + \beta_1 LNREER + \beta_2 LNRGDP + \beta_3 LNFDIGDP + \beta_4 LNIXGDP + \beta_5 LNTGDP + \beta_6 LNCETCGDP + \beta_7 D1 + \beta_8 D2 + \beta_9 T + U_t \dots \dots \dots 3.1.$$

Where: EXGDP= Dependent variable indicates export value to GDP ratio

Independent Variables

REER=Real Effective Exchange Rate

RGDP= Real Gross Domestic Product

FDIGDP= Foreign Direct Investment as percentage of GDP

IXGDP=Import plus Export as a percentage of GDP ratio

TGDP = Trade Tax as a percentage of GDP

CETCGDP= Capital expenditure on Transport and Communication as a percentage of GDP

D1= Dummy Variable which captures policy and regime change and takes 0 before 1991/92 and 1 for post 1991/92

D2= Dummy Variable which captures policy and takes 0 before 2004/05 and 1 for post 2004/05

T- Time trend which is include deflate the effect of time trend.

LN=Natural Logarithms

$\beta_1 \dots \dots \dots \beta_9 =$  coefficient of independent variables

$\beta_0 =$  Constant term or slope of the dependent variable

$U_t =$  The error term indicates other variables that affect the dependent variable that are not included in the model

### **3.6.3. Model Estimation and Testing Procedures**

To ascertain on the validity of the model there are test required to be conducted pre and post estimation test of time series econometrics analysis. Accordingly, pre estimation test for stationary of the time series data is conducted. Once the stationary of the time series data is determined bound test is used to assure the long run co integration among the dependent and independent variables and there by long run and short run coefficients is estimated from the ARDL model representation. Finally, to relay on the ARDL estimates various post estimation test are examined and the detail explanation are depicted as follows:

#### **A. Stationarity Test**

In estimating the time series models determination of the stationarity of the series data is indispensable to rely on these models. As noted (Asteriou and Hall (2007), Gujarati et. al (2012)) Stationarity of time series implies that the mean, and variance are constant in the long-run. In other words, shocks are temporary and over time their effect could be eliminated as the series reverts to long-run mean. Sataionarity of a time series data is important because if a time series is non-stationary we can study only the behavior of time period under consideration and at the consequence it is not possible to generalize it to other periods. Furthermore, regressing non-stationary time series would result to spurious regression.

Hence, Augmented Dicky Fuller (ADF) test is used to ascertain stationary of the variables. This test is conducted against the null hypothesis saying that the variables are non-stationary (the existence of a unit root problem) and alternative hypothesis saying that the variables have stationarity series.

#### **B. Cointegration Test and Error Correction Model**

Trended non-stationarity time series can potentially create major problem in empirical econometrics due to spurious regression. Hence, testing whether there is really exists a long run relation between the dependent and independent variables is important to avoid spurious regression (Gujarati et.al 2012). Accordingly, as it is explained in the previous section ARDL approach or Bound test to cointegration approach is used to ascertain the





#### **D. Multicollinearity**

One of the important assumptions of the OLS estimator is that, the explanatory variables that affect the dependent should not strongly correlate to each other. As noted Verbeek (2011) if there is a strong collinearity among the explanatory variables, it may lead to unreliable estimate with  $R^2$  (coefficient of determination), high standard errors and unexpected sign or magnitude. Similarly, Asteriou and Hall (2007) also argue that strong collinearity among the regressor will result violation of minimum variance and standard error and this affect the coefficients as it may fail to attain statistically significance due to low t-statistics, which may lead wrongly dropping of influential variables from the model. To avoid such problem test for the existences of strong multicollinairty problem is conducted using correlation matrix. According to (Asteriou and Hall (2007)) if the Correlation matrix among the independent variable is  $>0.9$  indicates the existence of strong multicollinearity.

#### **E. Test for serial correlation**

The problem of serial correlation exists, when the assumption of the OLS estimator that, the error terms are not serially corrected is violated. In time series data the error term is likely to be serially correlated each other across time. The existence of autocorrelation (serial correlation) leads inefficiency of the OLS estimator; biased and inconsistence estimation of the variance of the regression;  $R^2$  could be overestimated and the t-statistics can higher than the correct one (Asteriou and Hall, 2007). Therefore, Breush Godfery Lagrange Multiplier (LM) test is used to ensure that, the models are free from serial correlation problems. This test is examined against the null hypothesis that describes the non-existence of serial correlation, while the alternative hypothesis saying that there is serial correlation among the error terms.

#### **F. Heteroscedasticity Test**

One of the assumptions of the classical linear regression model (CLRM) is that the disturbance term is homoskedastic, that is it has constant variance. The violation of this assumption (the existence of heteroscedasticity) in the regression results leads to increase the variance of the coefficients of the independent variables and therefore, OLS

estimators become inefficient. Moreover, it also affects hypothesis testing because neither the t-statistics nor the F-statistics are reliable due to the inflated variance of the coefficients (Asteriou and Hall, 2007).

Accordingly, the Breush Pagan LM test is used to detect the existences of Heteroscedasticity. The null hypothesis of this test describe the error term is homoskedastic and the opposite is true for alternative hypotheses.

### **G. Model Misspecification Test**

In order to ascertain the correctness of the regression specified in estimating the model, it is important to conduct test for misspecification. Hence, Ramsey regression specification error test (Ramsey RESET- test), is used to examine the null hypothesis describing that the regression model is correctly specified and alternative hypothesis describing that the model is not correctly specified.

### **H. Model Stability Test**

Stability test is important to check the stability of the model. The stability of the model can be tested using the cumulative sum of recursive residuals (CUSUM) and the cumulative sum of squares recursive residuals (CUSUMQ) developed by Brown, Durbin and Evan (1975) based on the recursive residuals. This technique is appropriate for time series data. It uses critical straight line as boundaries. If the plot of (CUSUM) and (CUSUMQ) does not cross the straight-line boundaries given at the 5 % level of significance the model is stable. Otherwise, it is unstable (Greene, 2003). Accordingly, this test is used to test the stability of the model.

#### **3.6.4. Methods of Data Presentation**

The results of descriptive statistics are presented in the form of table, line time series graphs, and charts. While, the inferential statistics analysis results is presented by tables.

## **CHAPTER FOUR**

### **POLICY REFORM, TRENDS, COMPOSITION OF EXPORT AND ASSESMENT OF MARKETING STRATEGIES IN ETHIOPIA**

#### **4.1. Introduction**

This chapter first focused on descriptive analysis of the policy reforms, trends and composition of export performance in Ethiopia to address the first objective of the study. It has three main sections. The first section, deals with describing the export policy reforms conducted during the dergregime(pre1991/92) and post 1991/92. The second section evaluates trends of export interms of total amount, share to GDP and its capacity in financing import. The final section analyzes the composition of export interms of commodity and sectoral bases in pot periods.

#### **4.2. Export Policy Reforms**

##### **4.2.1. Export Policy Reforms during the Derg Regime**

When the Derg regime came to power in 1974/75, the overall economy has been changed towards socialism in which the economy is distorted by excessive intervention of the government. As part of it, the government has changed the existing export system to some extent. According to Berhanu (2003) the policy adopted in the pre-1991/92 period both in the Imperial and the derg regime was characterized by strongly inward-oriented development strategy, which used over valuation of the Birr, high tariff rates, extensive foreign exchange control and other non tariff barriers as well as heavy taxation on exports. These policies are likely to have a detrimental impact on export by influencing directly or indirectly the profitability and competitiveness of exports.

Their strategy was to focus on import substitution and they consider export as the second for their economic development plan. Such in ward development strategy discourages investors to participate in the export sector and investors were not interested to invest in the export sector. Unless export is promoted in different ways it is unthinkable to make

competitive in the international market. As a result, production level can be affected and this ultimately affects the performance of export.

Despite the measures such as export subsidy and other incentives were taken by the Derg regime to diversify export though the Ethiopian export products remained to be concentrated on a very few primary products like coffee, oil seeds, pulses, meat products, fruits and vegetables, live animals, chat bee's wax, petroleum products and leather and leather products which are almost primary products. Policy reforms were not taken timely in such a way exporters can able to compete in the international market.

Therefore, the overall export policy of the Derg regime was characterized by over valuation of exchange rate, high rate of tariffs together with other trade restrictive commercial policies. Hence, such policies distorted incentive to work and invest which was entirely against the design of workable export policy. As a result the export performance in the derg regime was low.

#### **4.2.2. Export policy Reforms Post 1991/92**

Following the downfall of the Derg regime in 1991/1992, with the view of stabilizing the economy, an economic reform program has been implemented in the country. The economic structure has been changed towards market oriented. As part of it, the government pursued trade policy reforms aiming at promoting exports through diversifying the countries commodity exports.

Several export policy reforms were made during post 1991/92. Exchange rate was devalued to 5 per US dollar from the fixed exchange rate of 2.07 during the derg regime. Tariff laws were continuously revised and export licensing were also simplified and become transparent. As a result duty draw backs (zero rate) and tax exempted privilege was given to exporters. Besides, to liberalize the foreign exchange market the transitional government also introduced a Dutch auction system. Foreign trade and financial market were reformed to allow private sectors participation in financial sectors such as commercial banks, insurances and micro credit services. As a result exporters have secured the lack of working capital in terms of pre-shipment and other export term loan

facilities. This loan facility is designed at the minimum interest rate which interns to minimize the cost and make exporters competitive in the international market.

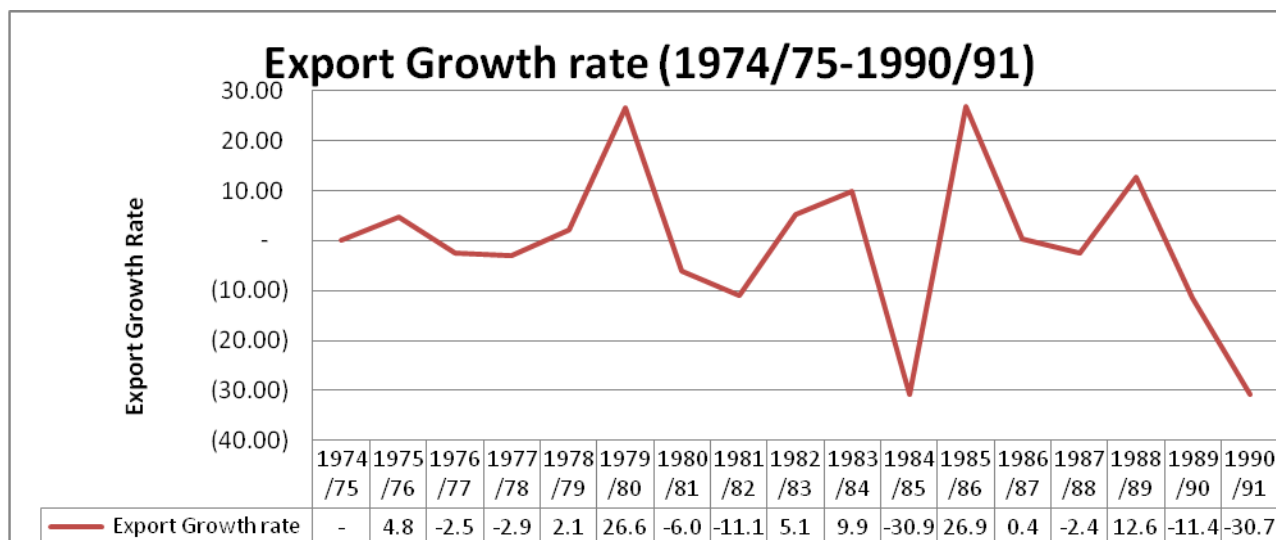
Due to the export reforms and incentives that have done the export industry has shown a significant diversification in terms of total export during post 1991/92.

### 4.3. Trends of Total of Export

#### 4.3.1. Trends of Export during the Derg Regime

According to the data collected from National Bank of Ethiopia, the trend of export during the Derg regime was characterized by ups and downs which were highly skewed to negative growth. It lacks sustainable growth over the whole periods. The trends of total export earning and its growth depicted in the following figure.

**Figure 4.1: Trends of Export growth (1974/75-1990/91)**



**Source: Own computation and data from NBE (2016)**

From the above figure (4.1), the trend for export rate increased by 4.8% by the year of 1975/76. But, export earning was being slow down for two consecutive years in the years of 1976/77 and 1977/78 by 2.5 and 2.9 percent respectively. This shows that the country has faced challenges with lack of foreign currency to import capital goods in its result it affects the gross domestic product in general and the export sector specifically. The highest growth rate of export earning was registered in the years of 1985/86 and 1979/80

showing 26.88 and 26.62 percent respectively. However, in 1984/85 the total export earning was declined to 30.88 due to the unfavorable economic situation created in the country especially, because of the wide spread of severe famine in most parts of the country worsened the economy in general and specifically the performance of export as well as most of the export items was agricultural products. Besides, in the year of 1990/91 the total export earning was declined significantly registering 30.71 percent. This was due to the political instability and the war that was prevailing in the country during that time.

It is surprisingly that in the whole 17 years the amount of total export decreases from 8.2 million birr to 6.02 million birr registering 26.5 percent negative performance.

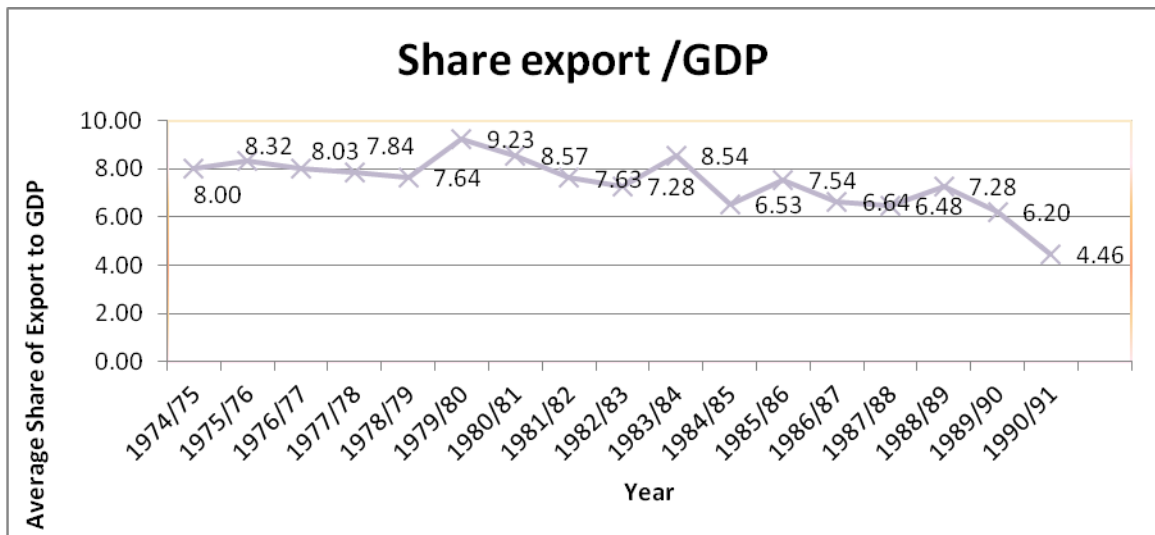
Therefore, Export earning lacks a sustainable growth rate to meet the government foreign exchange needs. This is due to the fact that, the captioned periods were characterized by socialist economic system together with the high political instability and continuous civil war. Besides, according to OECD (2010) it is difficult to register good export performance in the presence of weak export policy frame work, poor infrastructure, weak financial and capital markets and political instability.

Having the stated rationales in the derg regime it was difficult to attract investors in the export sector as a result it was difficult to promote export and establish good export system.

#### **4.4. Share of export as a percentage of Gross Domestic Products**

Share of export as a percentage of gross domestic products is an important indicator in the performance of export. The gross domestic production was increased by only 32 percent during the derg regime. This affects the export sector because in the country the production of goods and services were limited. Investors did not have a fertile ground to invest their capital on export oriented commodities since the economic policy was planned and no incentives schemes were given to export sector. As a result the share of export was low. The following figure (4.2) depicts the share of export to GDP ratio.

**Figure 4.2 Trends of Total Export as Percentage of GDP (1974/75-1990/91)**



**Source; Own computation and data from NBE (2016)**

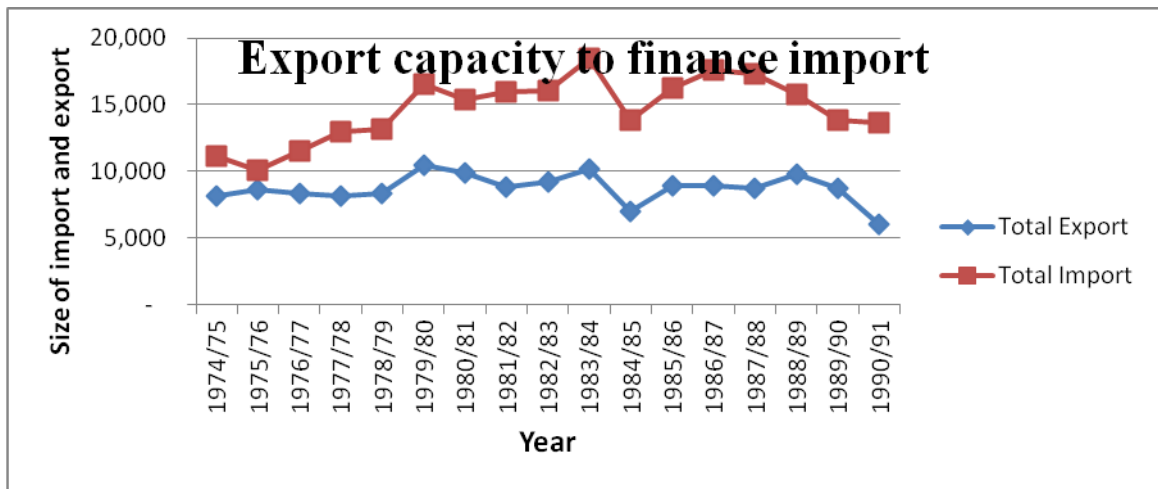
As it is indicated in the figure 4.2 above, Similar to the growth rate of export, the trend for the share of export to GDP ratio during the derg regime is characterized by ups and downs. The average share of export to GDP was 7.42 percent during the periods of derg regime from 1974/75-1990/91. The highest share of export to GDP was registered in the year of 1979/80 which accounts 9.23 percent. Like that of the total export trend, the export to GDP during this regime shows an increasing trend from 1981//82 up to 1983/84, then declines during the famine period from its peak of 8.54 percent in 1983/84 to 6.53 percent in 1984/85. However, after the decline of 1984/85 it starts to rise up to 1988/89 from 6.53 to 7.28 percent. In the year of 1990/91, export to GDP ratio was declined to 4.46 percent. This was due to the political instability and the war prevailing in the country which let the derg regime to be thrown down.

Therefore, the exports to GDP ratio of the country have shown trends of ups and downs during the whole period of 17 years trends. Thus, it can be inferred that during the derg regim, the export system fails to bring favorable share of export to GDP ratio.

#### 4.5. Export capacity to Finance Import

For a country to have favorable trade balance, the gap between export and import has to be minimal. During the derg regime there was a continuous negative trade balance. To show the trend of capacity of export in financing import the following figure is presented.

**Figure4.3 Export capacity to finance import**



**Source; Own computation and data from NBE (2016)**

From the figure above, the export capacity to finance import was 60.45 percent on the average during the derg regime. The share of Export capacity to finance import was highest in the year 1975/76 which accounts to be 85.13 percent. This, however, doesn't imply that the export was at its good performance which rather indicates both import and export were at their minimum levels. The lowest share of export capacity to finance import was registered in 1990/91. This was due to the political instability and the prevailing war in the country at that time. As it is mentioned in the analysis for total export the total export was substantially declined in 1990/91. Even though the gap between export and import was relatively minimum in the Derg regime but it was an unfavorable trade balance not only for its deficit trade balance but also for the contribution of economic growth. Due to the planned economic system the increased amount of export size was not to finance the imported capital goods development projects rather it was utilized for merchandise items.

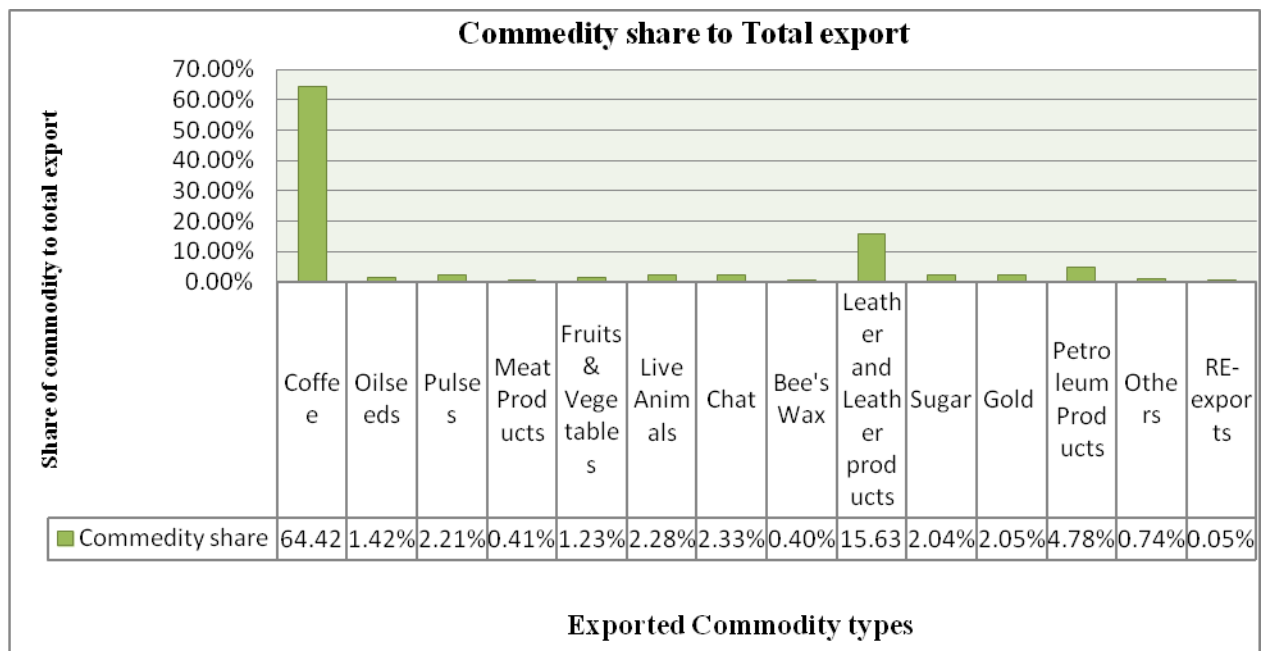
## 4.6. Export Composition

### 4.6.1. Commodity Composition during the Derg Regime

To make it clear and understood composition of export is analyzed based on commodity and sectoral bases. In the commodity base it is tried to address which type of commodity is exported at large. Whereas the sectoral bases of export is to be considered that which sector of the economy is continuously more towards export sector during the derg regime.

Obviously, commodity structure of the Ethiopian export sub-sector is a reflection of the country's overall economic structure. The nation's output and exports are highly concentrated on primary commodities, while the share of non-agricultural products in total merchandise exports was 25 percent during the derg regime. During these periods, primary products accounted averagely 75 percent of the merchandise export earnings of Ethiopia. As a result the total export performance in that period was low as it is mentioned in the trend analysis part. The commodity share to export is depicted in the figure below.

**Figure 4.4. Share of Commodity to Export Volumes**



**Source: Own computation and data from NBE (2016)**

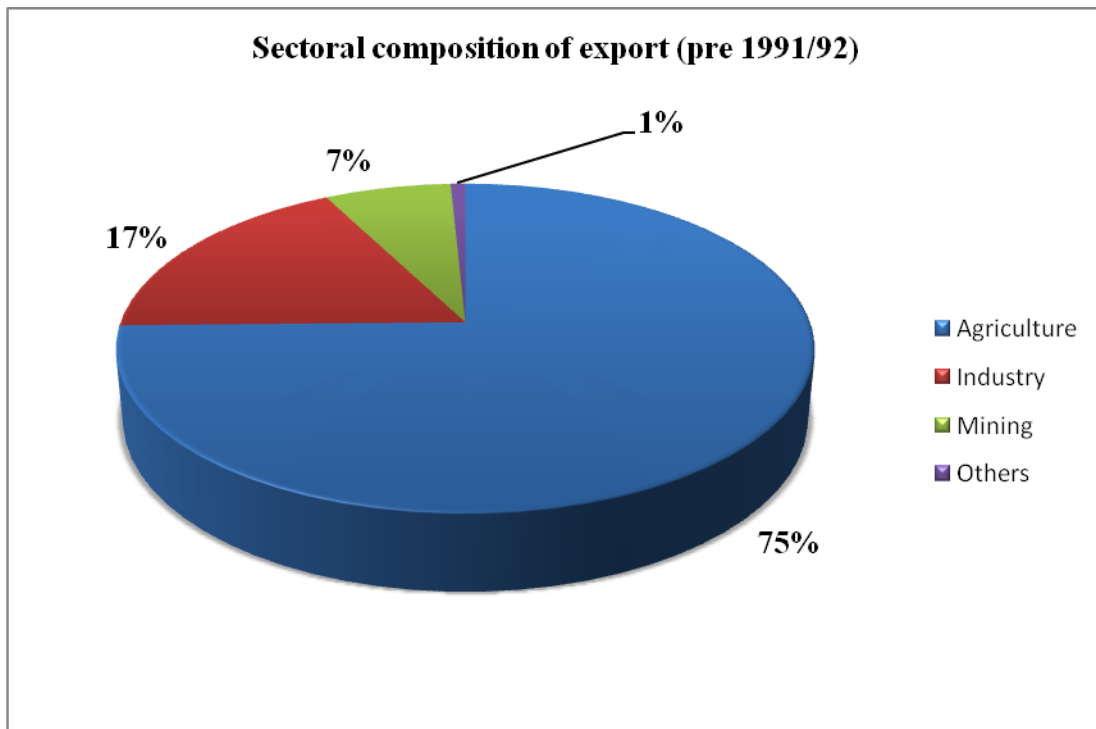
As it is indicated in the above figure 4.4 coffee accounts the lion's share of primary exports. From 1974/75- 1990/91 coffee alone accounted for 64 percent of the total export proceeds and 86 percent of the agriculture sector showing that the export was heavily dependent on coffee. Leather and leather product was the second commodity item that was exported during the derg regime. It was accounted for 16 percent of the total export and 88 percent of the Industry sector. In this regime exportable commodity were limited to a few products. Primary Commodities like cotton, cereals and flour, natural gum, civet hop; animal fodder, natural honey, flower and spices were not exported in the derg regime. Besides beverage and textile products were not also exported from the manufacturing sector. The smallest share of coffee in the total export was 8 percent in 1990/91, which was due to the war and thus the change in the government and political instability in the country.

#### **4.6.1. Sectoral Composition of Export during the Derg Regime**

Obviously, the sectoral structure of Ethiopia's exports is highly concentrated on primary agricultural products. Despite the fact that there is an associated higher degree of risks and uncertainties with the export of primary agriculture products, the country heavily depend on these products and accounts 75 percent on average for its total export earnings during the derg regime.

As it is shown in figure 4.5 below, the Ethiopian export is sectorally depend on agriculture. During the derg regime, export of raw agricultural products accounted for about 75 percent of the total merchandise exports on average. Whereas, the rest 17%, 7% 1% of export came from manufacturing, mining and others, respectively. This indicates that the Ethiopian export sector was highly dependent on traditional agriculture sector which has no value added items. In most cases raw materials which are not value added items are cheap in price. Besides the agriculture sector is highly depend on rain fall and it is categorized as labor intensive industry which utilizes less technology.

**Figure 4.5. Sectoral Composition of Export (1974/75-1991/92)**



**Source; Own computation and data from NBE (2016)**

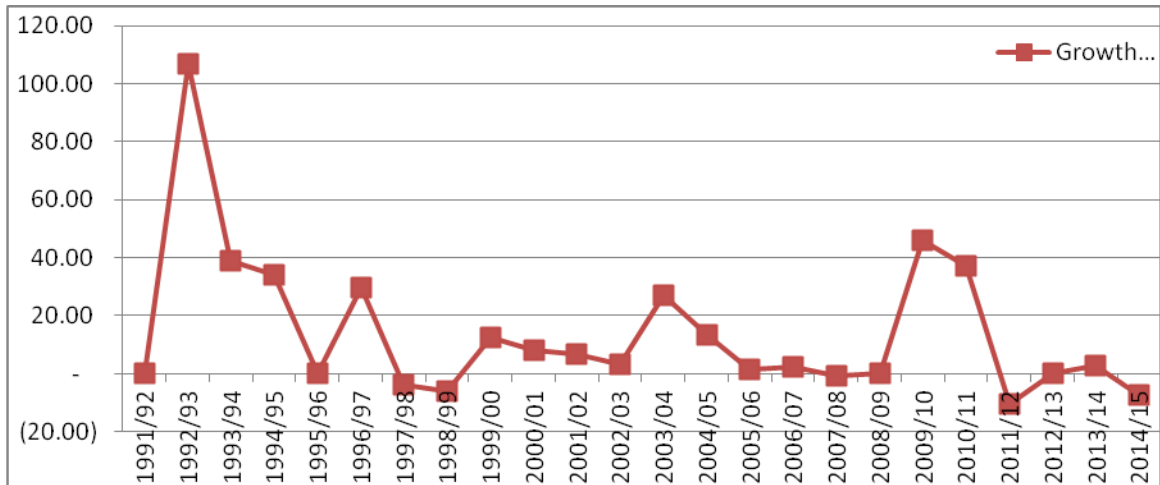
#### **4.7. Trends of Export Post 1991/92**

Similar to the trends revealed during the derg regime, the trends for export in post 1991/92 is concentrated on the growth rate of export, share of export to GDP ratio and capacity of export in financing import.

##### **4.7.1. Trends of Total Export**

Like that of the Derg regime the total export growth is characterized by cyclical trends. However, on the average the growth rate for total export registered positive growth. This was due to the export reform that was launched during the transitional government and the policies amended latter. The total export earning and its growth rate during post 1990/91 are depicted in the following figure 4.7.

**Figure 4.6 Trends of Total Export in Million of Birr (1991/92-2014/15)**



**Source; Own computation and data from NBE (2016)**

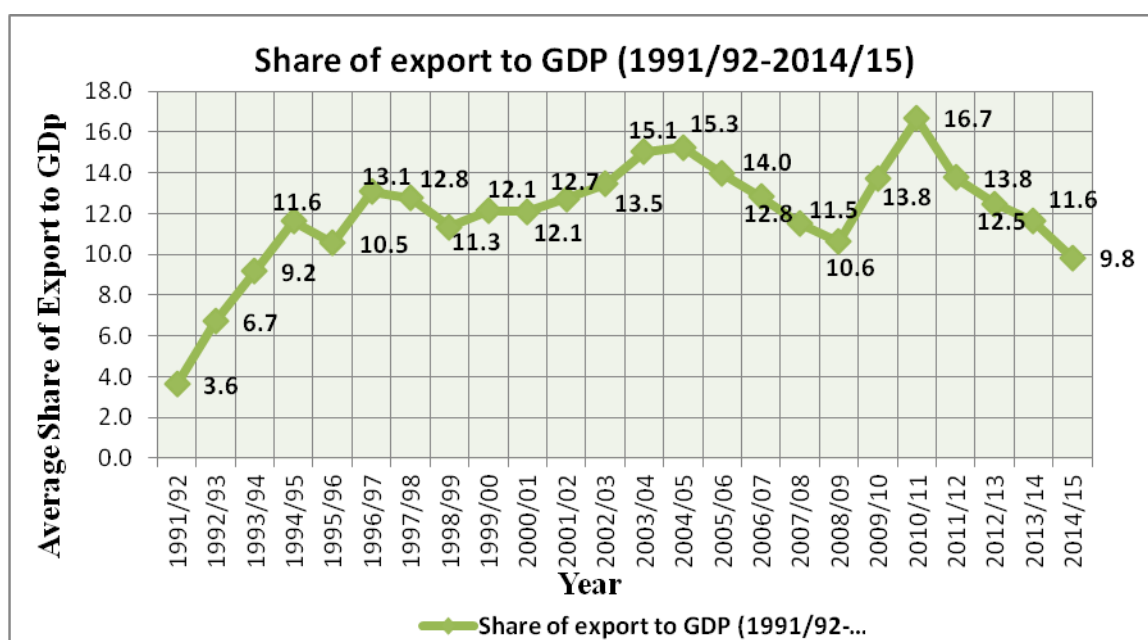
The above figure 4.6 asserts that, during 1991/92, the total amount of export earned was 4.73 million Birr, and steadily increases up to 1996/97, even though it has a cyclical growth rate with positive growth. During these years, the total export earning was increased on average by 13.40 percent each year. The amount of total export earnings in 1996/97 was 23.65 million Birr, which is 5 times the export earnings in 1991/92. In other words, it takes almost five year to multiply five times the export performance of the beginning period. Export performance during post 1991/92 was faster than that of the export performance of the Derg regime in which the average performance of export was declined by 0.56 during 17 years period. The growth rate of export was registered remarkably in the year of 1992/93 which accounts 106.99 percent. This was due to the policy change on exchange rate devaluation, export policy incentives by the transitional government and relatively stable political situation than before. The lowest growth rate of export was registered in 1991/92 because of the impact of the war and political instability during the year before. Starting from 1992/93 up to 1996/97 the export earning turned back to its upward trend by showing 41.94 percent average growth rate each year. Comparing to the previous period of 1991/92, the growth rate was higher. However, during 1997/98 up to 1998/99 export growth rate was declined on average by 4.76 percent. This is due to the fact that the country faces border conflict with Eretria which adversely affected the economy and thereby the export performance of the country. Then after, the growth rate of export continues to show ups and downs except for the years

2009/10 and 2011/12, the growth rate of export declined continuously even negatively at last.

#### 4.7.2. Share of Export to Gross Domestic Products

Even though the growth of export registered a positive trend on average, its growth as compared to the growth of the economy is low. The share of export to GDP ratio has shown an improvement from post 1991/92 to year of 2010/11 but its share is slow down.

**Figure 4.7. Share of Export to Gross Domestic product (1991/92-2014/15)**



**Source; Own computations and data from NBE (2016)**

From figure 4.7 above, the share of export to GDP has shown a positive trend up until 1994/95. This was due to the export policy reforms and the shifting of the economic system from planned to free market economy. However, share of export goes down to 10.5 percent from 11.6 percent in the year of 1994/95. Like that of the total export trend, the share of export to GDP has shown cyclical trends. Share of export to GDP ratio was registered on average 12 percent during post 1991/92 periods. The highest share of export to GDP was registered in 2010/11 and accounts for 16.7 percent. Share of export to GDP remained slow from the year 2011/12 up to 2014/15. The total export is declined to 74 million in 2014/15 from 86 million in 2010/11. Even though the economy is grown in

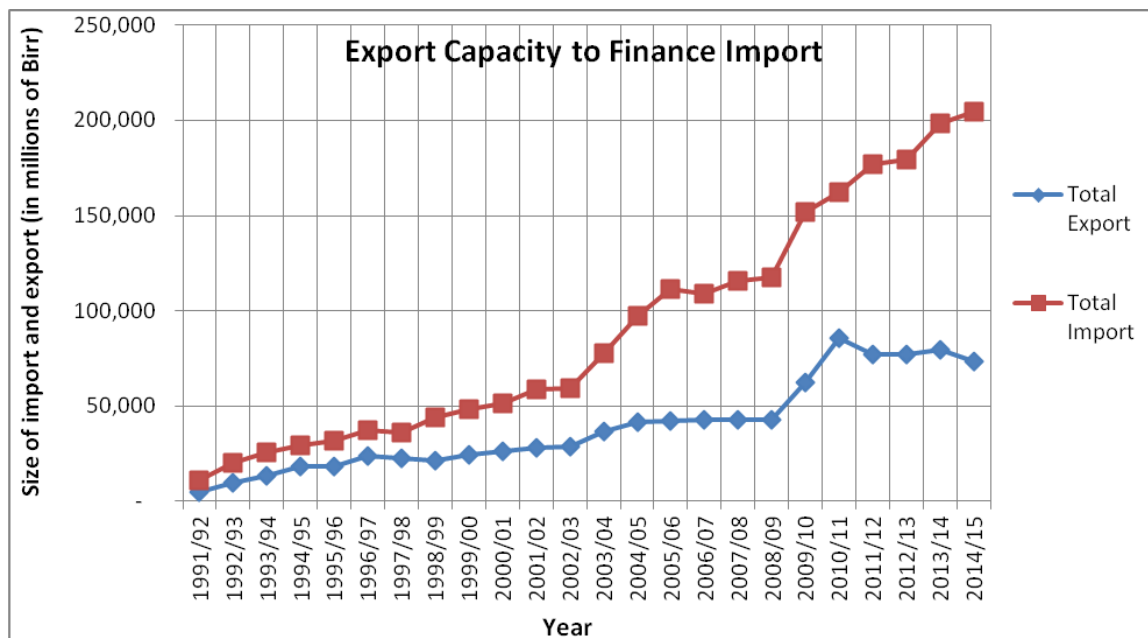
double digit, the share of export to GDP is being slow down. This indicates that there is a problem in export promotion in the international market. Besides, the capacity of exporters to compete in the international market is being limited. Surprisingly the share of export to GDP is declined to single digit and lowest which registered 9.83 by 2014/15 after 20 years period. This is because, the export sector is not still profitable and exporters are not investing in capacity building on how to compete in the international market. Rather, they only need to get foreign currency even at loss so that the loss is compensated from profit generated from import sector which is very critical and is miscalling the government to look it deeper and responds to it.

In general, even though the share of export to GDP is improved during post 1991/92 its share is not satisfactory especially in recent year's which is continuously declining.

#### **4.7.3. Export Capacity to Finance Import**

Similar to that of the derg regime, the capacity of export in financing import was declining in a fastest way. It is understood that in a growing economy capital goods are very crucial for sustainable development. Hence, the demands for capital goods worsen the trade balance between import and export. As a result, the capacity of export to finance import is smaller which account to be 47 percent which is lower than that of the capacity of financing import during the derg regime. To full fill the capital need for mega projects and to expand various development infrastructures the country's volume of import is increasing. Export could not cover the demand for foreign currency to import those capital goods. Surprisingly, its share to finance the import is on average below the 50 Percent on the average for the post 1991/92.

**Figure 4.8 Export Capacity to Finance Import**



**Source; Own computation and data from NBE (2016)**

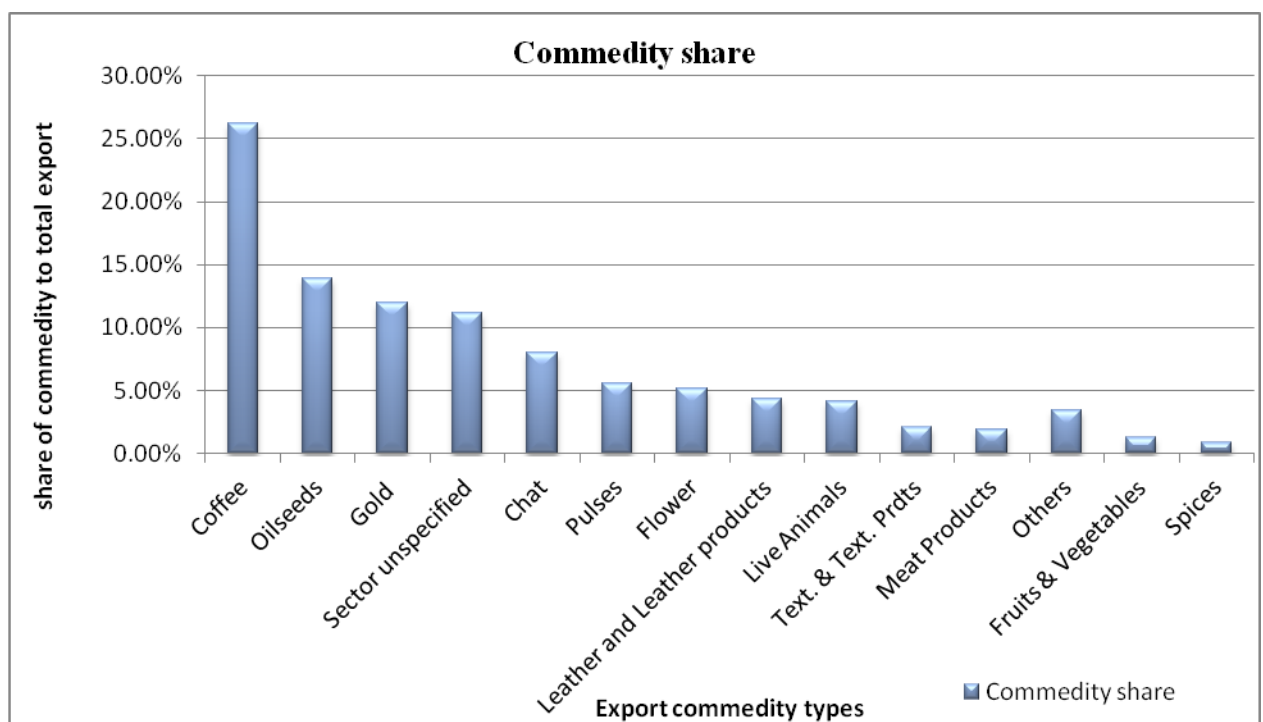
From figure 4.8 above the capacity of export to finance import is declined as time goes up. The share of export to finance import is 47 percent on average. The gap is increased from 2002/03 to 2007/08. However, starting from 2008/09 the export has grown continuously up to 2010/11 and tried to finance the import though this also grown continuously. The reason during this time Mega projects like the Grand Renaissance Dam and other sugar factories were planned. Such projects need capital goods which require foreign currency. As a result the gap between export and import was substantially increased in these recent years.

#### **4.7.4. Export Commodity Composition post 1991/92**

Despite of the export reforms conducted to diversify the total export, the export compositions of commodity in post 1990/91 have continued to depend more on coffee commodity but it has shown a significant diversification to other primary products. In 1991/92, when the export policy reform was commenced, the coffee commodity has shown lion’s share of the total export earnings in terms of commodity composition and accounts 56 percent. However, in the year of 2014/15 the share of coffee is declined to 29

percent. While the share of other commodities such as oil seeds, gold, chat and flower have increased to a large extent which accounts 15,9,8,6 percent respectively. During the period the flower sector shows a remarkable growth accounting for 5 percent of the total export in general and 6 percent in the year of 2014/15 specifically. Moreover, the export performances on textile and textile products have shown an improvement during the period. For instance, export of these products accounts averagely 2 percent during post 1991/92.

**Figure 4.9. Commodity Composition in Export post 1991/92**



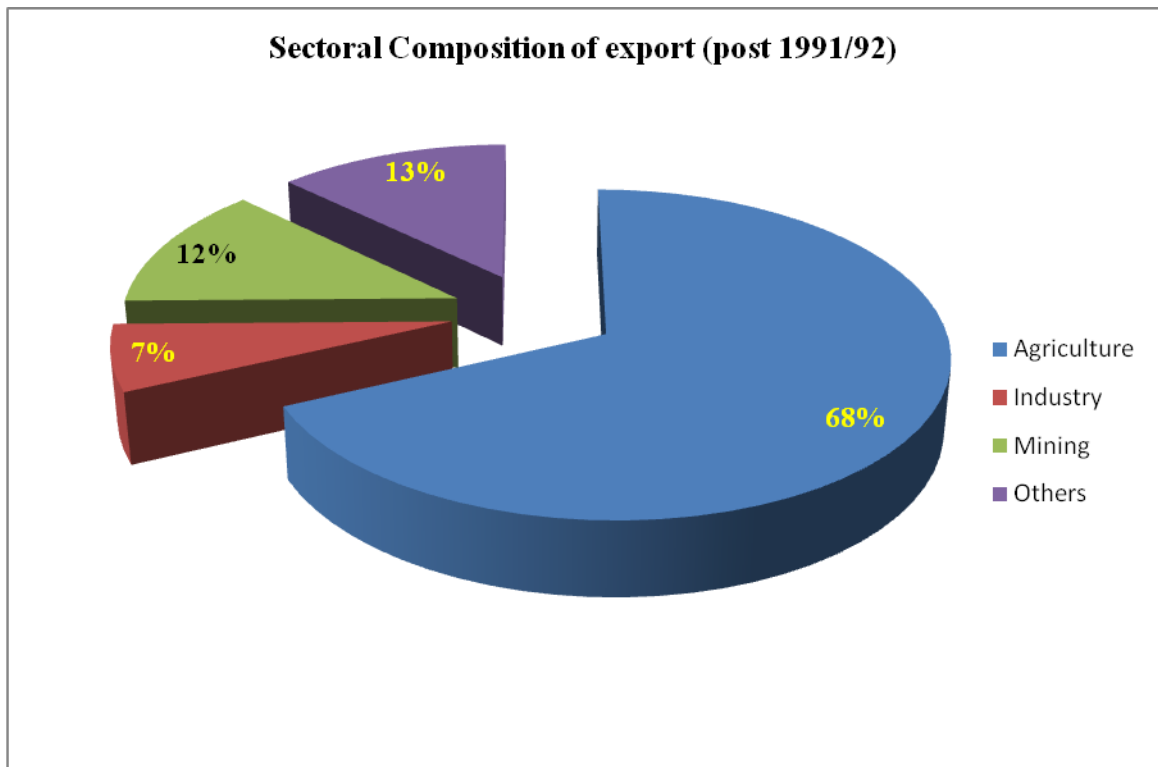
**Source; Own computation and data from NBE (2016)**

From figure 4.9 above, even though the share of coffee was declined as compared with non-coffee items during the derg regime it was remained to be the dominant exportable primary product during post 1991/92. Export of coffee was 26 percent on average during the regime. The export policy reform has played its own role on export diversification and there is a price cut for coffee in the international market in the recent times. For example commodities like oil seeds, flower, textile and textile products, chat and beverages have the newly introduced export items.

#### 4.7.4. Sectoral Composition of Export Post 1991/92

Even though a slight improvement has occurred on the sectoral composition of export sector, agriculture continued to be the dominant one in terms of export earnings. The composition of export in manufacturing sector has not grown as it is expected. As a result the country is ranked as the least industrialized country. However, there are new manufacturing products introduced during post 1991/92. Besides, there was a special attention for manufactures who are engaged in textile and textile products. For instance, manufacturers who participated in textile manufacturing and exported more than 50 percent have a tax holiday privilege beyond the zero rate and tax exempt given on the export policy reform programs. To look at the detail sectoral composition of export during this period, the following presents the shares of economic sectors.

**Figure 4.10. Sectoral composition of export (post 1991/92)**



**Source; Own computation and data from NBE (2016)**

From the figure above, it can be understood that the volume of export highly dominated by agriculture sector. The agriculture sector registers on average 68 percent of the total

export. It is almost 10 times larger than the composition of the industry sector which accounts 7 percent on average. The share of industry is smaller than that of the composition in the derg regime. However this does not imply that the performance of the manufacturing during this regim is below the performance of the derg regime. This is rather because it is understood that the total export earning in post 1991 was remarkably though the composition of industry was not grown equally with the other sectors. The composition of mining and others which their sectors are not specified registered 12% and 13% respectively. So, it can be inferred that agriculture is still the contributor towards the volume of export which implies that such dependency on this sector might not be good enough as the country is focusing on major mega projects that need significant amount of hard currency.

#### **4.8. Assessment of Marketing strategies in the Ethiopian Export Sector:**

In the literature it is reviewed that the role of marketing mix is vital for the export performance. Having this theoretical perspective, it is tried to assess what marketing mixes exporters utilize in the Ethiopian export sector. Thus, the researcher has interviewed 10 export managers using purposive sampling so as to dig the relevant information that is essential to answer the research question on this regard. This is because of the fact that data based on interview is easily extracted as the researcher has the option of asking relevant questions repeatedly until the questions are replied sufficiently. Accordingly, the information obtained from the concerned export managers with regard to the variables such us product strategy, price strategy, place strategy, promotion strategy, entry strategy and availability of international information are presented as follows.

##### **4.8.1. Product strategy;**

In relation to this strategy the core interview question was related with regard to product type, design, and quality of the product accompanying with the challenges there with. Based on the stated interview questions most of the firms' export managers replied that the product that they export are coffee and sesame products justifying that the Ethiopian export sector is concentrated on few product types. Moreover, this finding is again supported by the data obtained through secondary data showing that the main export

products in the country are primary products and 68 percent on average of the export performance depends on agricultural products mainly coffee and sesame. This shows that the product design is not the concern of most exporters in the international market in Ethiopian case in which one can understand that the poor product strategy exporters are using may have negative implication to the poor performance of export in Ethiopia.

However, though Ethiopian coffee is organically produced product and the oil seeds and pulses are known for their flavor and nutritional value, the quality of the Ethiopian products in the world market is not attractive and its brand building stage is low. This is because most of the export items of the country are unprocessed, raw material which do not add value domestically and the raw materials are processed by other countries.

Surprisingly, according to the some interviewed exporters the largest importer of the Ethiopian sesame in the current time is China. Japan is the largest sesame consumer from the world and imports sesame from china. China imports sesame from Ethiopia and exports to Japan. But the Ethiopian exporters do not export directly to Japan because of the quality problem which again show that the product strategy with quality perspectives is at its initial stage that again has a say to the export performance.

As to the challenges with adequate product strategy, the researcher has interviewed the selected exporters and most of them have mentioned the following ones; lack of skilled man power, lack of advanced technology, poor research and development and lack of finance. Besides this, however, it is stated that there are firms who participate in domestic trade seminars and international trade fair and expo, workshops and seminars through arrangements made by Ethiopian chamber of commerce. But, still, such trials have not resulted in a great success in this sector.

Therefore, the lessons taken from the Ethiopian exporters is that they should have to focus on quality of the product have to diversify the export items to compute in the international market and enhance their export performance.

#### **4.8.2. Pricing strategy**

Like that of the product strategy pricing is also a crucial marketing mix in international marketing decision which this decision affects the export performance of the country. To address this point an interview question was forwarded with regard to the pricing strategy exporters are using if any. In addition, it was asked as if the products our exporters are exporting are competitive enough from the price perspectives in the international market.

Accordingly, most of the interviewees replied that their pricing strategy decision depends up on the global market price and the exchange rate flexibility. However, from the interview result it is found that the products are not price competitive. This can be related with the discussion made in the above sub section with regard to product strategy in which the problems in quality product may be attached with price competitiveness. Therefore, it is likely that the less competitiveness of price of export products might have an impact in the export performance of the country.

Of course to support the exporters and make the Ethiopian products competitive in the international market the Ethiopian government depreciates the Ethiopian currency from time to time. Theoretically this policy issue is valid which helps to provide the Ethiopian products cheap in the international market which finally affects the export performance of the country. But practically this can be influenced by other factors such as the supply of the products and the quality of the product as well. To make valid the currency depreciation the supply of the export products must be elastic and the quality of the product should be recognized.

Hence, the pricing strategy for the Ethiopian exporters is to provide at low price so that to enhance the sales volume which entirely affects the export performance. Practically the pricing strategy is to sale their products in the international market at low price as fast as possible so that the loss gained from export would compensate from the import sector. Most of the firms engaged in the export sector are importers. If exporters were allowed only in the export business without having the import business, they would not have been survived. Thus, such evidence is suggesting that to what extent the export sector of the

country is in critical problem. Therefore, the export pricing strategy is questionable and is adversely affecting the export performance.

#### **4.8.3. Promotion strategy**

This strategy is again one of the theoretically noticed marketing mixes. And to assess its say towards the export performance of the country, selected exporters were asked as if they promote their products in the international market. To further substantiate the evidence, the researcher has interviewed them as to what specific export promotion strategies do they exercise.

As a result, most of the interviewees replied that their strategy with this regard is mostly on internet marketing via website advertisement and making relationship while they are participating in the international trade fair, expos, workshops and seminars. To this effect, it is understood that most of the companies have developed websites to promote their products by providing potential customers with information as well as to interact with consumers.

Of course internet marketing allows feedback and forth follows of information where users can participate in and modify the form and content of information in real time. It helps also to take immediate responses and actions up on the interacting communication.

When the case is to Ethiopian exporters using internet is used as a means of advertising on web and exchanging information in buying and decision according to the interviewees' response. Besides public relations through embassies and business directory which are prepared by various institutions such as Ethio Telecom, and chamber of commerce have a great role to create awareness both domestically and internationally so that to enhance the export performance of the country. However, from the interview, it is again understood that the other promotional mixes such as advertising and sales promotion are ignored to promote the export performance in the international market.

Therefore, the promotional mix strategy in the export performance of Ethiopia depends up on the internet communication, public relations via embassies and the business directory.

#### **4.8.4. Place strategy**

This strategy is related with the distribution channel between exporters and importers or between producers and consumers. To assess this strategy with respect to the Ethiopian export performance, an interview question was forwarded to the selected interviewees to brief their strategies with regard to place.

According to the interviewees' response, distribution and timely delivery are perceived to be important in the export performance and this might also be affected by the distance between the exporting and importing countries. Besides, the efficiency and the effectiveness of the intermediaries like the Ethiopian shipping lines have a significant effect on the export performance.

In general from the experience of the interviewees it is found that product quality strategy and pricing strategy are the most in the eye of customers.

#### **4.8.5. Export Entry strategy**

In this sub topic possible export entry modes that the Ethiopian exporting companies use in its foreign market entry are assessed and analyzed. In the literature it is tried to review that choosing the right entry modes is one of the most decisive factors that affect the export performance of the country in international market. Therefore, to address this issue, an interview question was asked to the export managers if their entry to the export sector is easy or not. Similarly, interviewees were asked to explain the challenges to participate in the export market if entry is found to be difficult. To further dig out the information they were asked about their detail export entry strategies by substantiating their experience in this area.

According to the responses with regard to the above stated interview questions, it was found that entry to the international market is not as easy as we think to most of exporters in the country. This is because many Ethiopian exporters are working on the export sector based on traditional way and they simply work with the experience they have excluding the contribution of professionals. Similarly, most of the exporters need not to transfer the interacting communication with foreign customers (importers) and

decisions prevailing in the export sector. So the challenges here with the export entry are lack of skilled and professional man power, technology advancement, and lack of financial capacity as well.

It is theoretically known that companies can enter foreign markets either in terms of foreign direct investment or without foreign direct investment. The export entry mode in the case of Ethiopia is through exporting or licensing where the companies use intermediary (Agents) from abroad in business transactions. Besides, banks such as the issuing bank and advising bank participate in the international trade using letter of credit or other payment methods.

#### **4.8.6. Availability of information about international trade**

The value of information in the international trade has paramount importance in most companies which have an export trade. To make a discussion up on this sub topic with respect to the Ethiopian export sector, interviewees were asked if getting international market information is difficult or not. If there are obstacles facing with accessing the international market information, they were also invited to explain such obstacles. Similarly, an interview question was forwarded to them as if they have marketing intelligence unit and to brief the detail activities this wing performs.

Based on the responses obtained from the interviewees, most of the companies have got international information via mass media using the BBC business news and some others from exchanging messages via email. Hence, there is no difficulty in getting information in the international market. Even the Ethiopian commodity exchange authority provides for exporters the price of ECXs products at international level. However, for the question saying that is there any marketing intelligence almost all replied that there is no marketing intelligence in their company. The method of collecting of information from their competitors is informal and traditional in which such unit it the theoretical aspect has many functions to deal with so as to contribute to the performance of the export sector.

## CHAPTER FIVE

### Estimation and Interpretation of Model for Factors that Affect Export Performance

This section deals with estimation and interpretation of factors that affect export performance of Ethiopia. Initially, summary of descriptive statistics of variables used in the model are presented, and then relevant pre-estimation tests of stationary of time series and bound test are conducted to ascertain the long run relationship between the export performance and its independent variables. Then interpretation of long run and short run coefficients and post estimation diagnostic test are performed.

#### 5.1. Summary of Descriptive Statistics of Variables

Descriptive statistics shows the overall measurement of the variables used in estimating the model in terms of mean, median, maximum, minimum values, standard deviation, and total number of observations used in estimating the model. Accordingly, it is depicted in the following table.

**Table 5.1. Summary of descriptive statistics of variable**

Variable	LNEXGDP	LNREER	LNRGDP	LNFDIGDP	LNIXGDP	LNTGDP	LCETCGDP
Mean	2.26	5.01	12.18	0.68	3.34	1.33	0.57
Median	2.29	5.09	11.96	0.26	3.37	1.36	0.64
Maximum	2.81	5.70	13.53	1.87	3.93	1.81	1.41
Minimum	1.29	4.51	11.54	-0.04	2.50	0.49	-0.70
Std. Dev.	0.34	0.31	0.59	0.69	0.40	0.29	0.60
Observations	41.00	41.00	41.00	41.00	41.00	41.00	41.00

Source: Authors Computation based on, MoFED NBE and UNCTAD data, 2016

As it is indicated in table 5.1, above export as percentage of gross domestic product expressed in the form of logarithm, (LNEXGDP) which is, the dependent variable has a mean value of 2.26, median 2.29 and maximum value of 2.81. The standard deviation,

which measures the coefficient of variation, is low (0.34). This indicates that LNEXGDP has low variation from the mean for the whole period of study.

While, the among independent variables real effective exchange rate which are expressed in the form of logarithm (LNREER) has a mean value 5.01, maximum value 5.70, minimum value 4.51 and standard deviation 0.31 which shows the variable has lower variation from the mean in all observation considered in this study.

LNRGDP that indicates the real gross product expressed in the form of logarithm has mean value of 12.18, maximum value 13.53, minimum value 11.54 and standard deviation 0.59 standard deviation below one indicating low spread or variation of the variables from their means. The foreign direct investment as percentage of gross domestic product expressed in the form of logarithm (LNFDIGDP) has a mean value of 0.68 and standard deviation of 0.69. Relatively the data for this variable has higher variation from the mean in the sample period. This variable has also minimum value of -0.04 and maximum value 1.87.

The import plus export as percentage of GDP expressed in the form of logarithm (LNIEGDP) which measure the openness of the economy to the outside world has mean value of 3.34, maximum value 3.93, minimum value 2.50 and standard deviation 0.40. Hence, this variable has medium variation from the mean compare to other variables. LNTGDP, which indicates the trade tax as percentage of GDP has mean value of 1.33 and standard deviation 0.29. Finally the capital expenditure on transportation and communication as a percentage of GDP (LNCETCGDP) has mean value of 0.57 and standard deviation of 0.60. To estimate the model 41 year's numbers of observation ranging from 1974/75 up to 2014/15 were used to infer valid regression.

## **5.2. Stationarity Test of Variables**

In most cases, macroeconomic time series are trended and therefore they may be non-stationary. The problem of non-stationary or trended data is that standard OLS regression procedures can easily lead to incorrect conclusions. Therefore, it is necessary to perform the stationarity test of these variables. Moreover, in order to apply ARDL bound test

approach to co integration, it is valuable to ascertain none of the variables are integrated at order two [I (2)].

Accordingly, Augmented Dicky Fuller (ADF) test was used to determine the stationarity of the variables and it is depicted in the following Table 4.2. The result of ADF test statistics was examined against the null hypothesis ( $H_0$ ) of the underlying time series data that has a unit root problem (non-stationarity) and alternative hypothesis ( $H_1$ ) of the time series is stationary.

At level, most of the variable used in estimating model (LNEXGDP, LNREER, LNRGDP, LNIXGDP, and LNTGDP) the calculated ADF t-statistics is less than the critical value even at 10% level of significance implying that these variables are not stationary so that the null hypothesis cannot be rejected. On the other hand, the calculated ADF t-statistics with trend for LNFDIGDP and LNCETCGDP is greater than the critical value given at 10% level of significance and even the probability is less than 10% so that the null hypothesis can be rejected, meaning that these variables are co integrated at order zero (I(0)). However, they have weak stationarity since the ADF t-stat. only significant at 10% (see table 4.2)

To avoid the possibility of spurious regression it is paramount determination of order of integration for the rest of variables and depicted as follows.

**Table 5. 2. Unit Root Test of Variables used in the Model**

Variable	Types of equation	At level		At first difference		Order of integration
		ADF-t stat.	Prob.	ADF-t stat.	Prob.	
LNEXGDP	Intercept only	-1.67881	0.434	-5.34901*	0.0001	I(1)
	intercept and trend	-2.07459	0.5437	-5.27763*	0.0006	I(1)
LNREER	Intercept only	-1.82026	0.3656	-5.68532*	0.000	I(1)
	intercept and trend	-2.07874	0.5415	-5.61508*	0.0002	I(1)
LNFDIGDP	Intercept only	-0.5289	0.8743	-7.50662*	0.000	I(1)
	intercept and trend	-3.1991	0.0991***	-5.40405*	0.0001	I(0) &I(1)
LNRGDP	Intercept only	4.263835	1	-1.96159	0.3018	I(1)
	intercept and trend	0.840029	0.9997	-6.63592*	0.0000	I(1)
LNIXGDP	Intercept only	-1.17905	0.6741	-5.85862*	0.000	I(1)
	intercept and trend	-1.77816	0.6965	-5.79345*	0.0001	I(1)
LNTGDP	Intercept only	-2.1519	0.2264	-5.40405*	0.0001	I(1)
	intercept and trend	-2.14221	0.5075	-5.33015*	0.0005	I(1)
LNCETCGDP	Intercept only	-1.74961	0.3993	-7.42293*	0.000	I(1)
	intercept and trend	-3.30868	0.0794***	-7.33337*	0.000	I(0)&I(1)

Critical value for intercept only: 1%=-3.60559, 5%=-2.93694 and 10% =-2.60686

Critical value for intercept and trend: 1% = -4.205, 5% = -3.52661 and -3.19461

\*and \*\*\* indicates statistically significant at 1 % and 5% level of significance.

Accordingly, the first difference result of ADF test indicates that all variables have stationarity and integrated order of one [I (1)]. Since, the ADF test T-statistics calculated with trend and (without trend except for LNRGDP) is greater than the critical values give at 1% level of significance for all variables, the null hypothesis is rejected. This implies that all the remaining variables maintained their stationary at order one [I (1)] or at first difference.

Hence, the ADF stationarity test also ascertains that LNFDIGDP and LNCETCGDP are integrated at order one even though they have weak stationary at level. On the other hand LNEXGDP, LNRGDP, LNREER, and LNTGDP are integrated at order one meaning

they maintains their stationarity at first difference and we can apply the bound test to ascertain long run relationship among the dependent and independent variables.

### 5.3. ARDL Bound Test for the Model

Econometric analysis of long-run relations has been paramount significance in empirical studies for valid inferences. As it is mentioned in chapter three, ARDL approach or bound test to cointegration was used to ascertain the existence of long run relationship among the dependent and independent variables.

The bound test is examined against the null hypothesis ( $H_0$ ) of there is no long run relationship between the dependent and independent variables and the alternative hypothesis ( $H_1$ ) of there is a long run relationship among the variables. The bound test F-statistics calculated has been examined against the peasaran et al (1999) critical values. The decision rule is that, at a given level of significance if F-statistics is greater than the upper bound [I (1)], the null hypothesis is rejected, if it is below the lower bound [I (0)], all the variables are integrated at order zero and the null hypothesis will not be rejected. In addition, if it is in between the lower and upper bound, the result is inconclusive and it requires further re specification of the model. The bound test is depicted in the following table.

**Table 5.3. ARDL Bounds Test**

Sample: 1979-2015		
Included observations: 37		
Null Hypothesis: No long-run relationships exist		
Test Statistic	Value	K
F-statistic	4.09468	6
Critical Value Bounds		
Significance	Lower Bound (I(0))	Upper Bound (I(1))
10%	2.53	3.59
5%	2.87	4
2.50%	3.19	4.38
1%	3.6	4.9

Source: Author computation based on MOFED, NBE and UNCTAD data, 2016

As it is indicated in the table 4.3 above the bound test of F-statistics is 4.094 and it is higher than the upper bound critical value 4 given at 5% level of significance. This implies the null hypothesis is rejected and thereby the existence long run relationship between export performance and its determinant included in the model was confirmed.

#### 5.4. Interpretation of the Long Run Coefficients

The long run coefficient of the variables, estimated using the ARDL model are stated in the following table.

**Table 5.4: ARDL Estimate of Long run Model**

Selected Model: ARDL (4, 0, 1, 0, 2, 2, 2)				
Dependent Variable :LNEXGDP				
Regressors	Coefficient	Std. Error	t-Statistic	Prob.
LNRGDP	0.33764**	0.13784	2.44951	0.0262
LNIXGDP	0.99836*	0.2734	3.65171	0.0022
LNREER	-0.3002***	0.16368	-1.8343	0.0853
LNFDIGDP	0.1872**	0.0824	2.27181	0.0373
LNTGDP	-0.3883***	0.22372	-1.7357	0.1018
LNCETCGDP	-0.0415	0.20304	-0.2042	0.8408
D1	-0.178	0.11028	-1.6141	0.126
D2	0.1102	0.15276	0.7214	0.4811
C	-2.5616	2.03007	-1.2618	0.2251
@TREND	-0.0292	0.01271	-2.2986	0.0353

\*, \*\*, and\*\*\* indicates statistically significant at 1%, 5% and 10% respectively

Source: Author Computation, based on MOFED, NBE and UNCTAD data 2016

Table 5.4 shows the long run coefficient of the explanatory variables with their standard error, t-statistics and probability. The optimum lag of the model is selected based on Akaike information criterion. Since the model is LOG linear the coefficient of each variables are partial elasticity's.

The LNRGDP indicates the real gross domestic product, which measures the production capacity of the country positively affects the export performance of the country expressed

by (LNEXGDP) as expected and statistically significant at 5% level of significance. The coefficients this variable, 0.33764 shows that averagely in the long run one percent increase in real gross domestic product, increases the export to GDP ratio by 0.33764 percent during the study period of 1974/75-2014/15, keeping the effect of other explanatory variables constant.

The result of this finding confirms not only theoretical perspective but also empirical studies conducted in both developing countries and individual countries. For instance, Majeed and Ahmed (2006) also found positive relationship between RGDP and export performance in their study in developing countries. Similarly, the study conducted by Agasha (2006) in Uganda confirms the positive effect of RGDP on export performance of the country. With regard to previous studies conducted in the Ethiopia, Nega (2013) also found a direct relationship between RGDP and export performance of the country expressed in terms of LNEXGDP.

Openness of the economy that is indicated by LNIXGDP affects positively the export performance of the country. The result confirmed as per the formulated hypothesis and is statistically significant at 5 % level of significance. The coefficient of this variable is 0.99836 shows that averagely in the long run one percent increase in import plus export as percentage of GDP, increases the export to GDP ratio by 0.99836 percent during the study period of 1974/75-2014/15, keeping the effect of other explanatory variables constant.

In a similar fashion the study conducted by Ahmed (2000) revealed openness of the economy has a positive relationship with export performance of the country. In addition, Seyyed et.al (2011) have got the positive effect of LNIXGDP on export performance of the country. However, according to Giovani and Levencko (2007) LNIXGDP affects negatively for export performance of the country due to the external shocks and prevailing uncertainty.

Therefore, the result this study showed a positive relationship between LNIXGDP and export performance of the country.

LNREER (the real effective exchange rate), which measures the relative price of countries export affects the export performance of the country negatively. It is not found as the expected result in the hypothesis but statistically significant at 5% level of significance. The coefficients this variable, 0.3002 shows that averagely in the long run one percent increase in real effective exchange rate decreases the export to GDP ratio by 0.3002 percent during the study period of 1974/75-2014/15, keeping the effect of other explanatory variables constant.

Theoretically, real effective exchange rates have positive relationship with export when the quantity of export is elastic and when the quality of the product is good. However, if the elasticity of supply of export inelastic and the product quality is not improved, devaluation in exchange rate may negatively affect the export performance of a given country. Having this rationales the real effective exchange rate in Ethiopia has found negatively related. This implies that the supply of export is inelastic and it has poor quality as compared in the international market. This is due to the fact that the export of the country is dominated by primary agricultural products and these cannot be significantly increased in supply with respect to volume and quality.

Besides, the result was contrary of the study conducted by Sharma (2001) in India which was found a positive relationship between real effective exchange rate and the performance of export in the country. According the study conducted by Kasekende and Atingi-Ego (1999) also found no significant relationship between real effective exchange rate and export performance.

LNFDIGDP (foreign direct investment as percentage of GDP), which measures the capital inflows affect the export performance of the country positively. The result revealed as expected in the hypothesis and statistically significant at 5% level of significance. The coefficients of this variable 0.1872 shows that averagely in the long run one percent increase in foreign direct investment to GDP ratio, increases the export to GDP ratio by 0.1872 percent during the study period of 1974/75-2014/15, keeping the effect of other explanatory variables constant.

The result of this finding confirms not only theoretical perspective but also empirical studies conducted so far. For instance, Grosse and Trevino (1996) also found positive

relationship between LNFDIGDP and export performance in their study. Similarly, the study conducted by skosan and kabuya (2014) in Netherland confirms the positive effect of LNFDIGDP on export performance of the country.

LNTGDP (the trade tax to gross domestic product), which measures the international trade taxes, affects the export performance of the country negatively. It is not found as the expected result in the hypothesis but statistically significant at 10.18% level of significance and this implies the variable has statistically weak effect in the export to GDP ratio of the country. The coefficients of this variable, 0.3883 shows that averagely in the long run one percent increase in international trade tax, decreases the export to GDP ratio by 0.3883 percent during the study period of 1974/75-2014/15, keeping the effect of other explanatory variables constant.

However, the result was contrary of the study conducted by Majeed and Ahmed (2006) in developing countries, which was found a positive relationship between international trade tax and the performance of export in the country. This was assumed for those countries, which has fiscal incentives by the government.

While the rest of explanatory variables such as the indicators of infrastructural development (LNCETCGDP) and policy and regime change dummy variables are found statistically insignificant even at 10% level of significance to affect the export to GDP ratio of the country.

Therefore, the long run estimate of the ARDL model reveals that the, real gross domestic product, openness of the economy, and foreign direct investment have statistically significant positive effect on the export performance of the country. On the other hand, real effective exchange rate and international trade taxes adversely affect the export performance of the country even though trade taxes have weak statistically significant to affect the export to GDP ratio of the country. But the infrastructural development and policy and regime change dummy variables are found statistically significant to affect the export performance of the country.

### **5.5. Interpretation of the Error Correction Model and Short Run Coefficients**

The coefficient of error correction model (ECM (-1)), shows how quickly or slowly the variables return to their long run equilibrium and it should have a negative sign with statistically significant. In other words, it provides the feedback or the speed of

adjustment whereby short run dynamic converges to the long run equilibrium path in the model. Accordingly the short run dynamic coefficients and the error correction model coefficients was depicted in the following table.

**Table 5.5: ARDL Estimate of Short Run Dynamic Coefficient and the Error Correction Model Coefficient**

<b>Selected Model: ARDL(4, 0, 1, 0, 2, 2, 2)</b>				
<b>Independent Variable</b>	<b>Dependent Variable: D(LNEXGDP)</b>			
	Coefficient	Std. Error	t-Statistic	Prob.
D(LNEXGDP(-1))	0.092552	0.11854	0.780751	0.4463
D(LNEXGDP(-2))	0.131029	0.08323	1.574253	0.135
D(LNEXGDP(-3))	0.210182**	0.07474	2.812206	0.0125
D(LNRGDP)	-0.024273	0.28644	-0.08474	0.9335
D(LNRGDP(-1))	-0.55010***	0.26121	-2.106031	0.0513
D(LNIXGDP)	1.105529*	0.17204	6.426101	0.000
D(LNREER)	-0.23008**	0.10629	-2.164628	0.0459
D(LNFDIGDP)	0.143457*	0.04872	2.944811	0.0095
D(LNTGDP)	-0.08584	0.11324	-0.758016	0.4595
D(LNTGDP(-1))	0.145473	0.10972	1.325854	0.2035
D(LNCETCGDP)	-0.013478	0.06607	-0.203994	0.8409
D(LNCETCGDP(-1))	0.082146	0.06808	1.206659	0.2451
D(D1)	-0.136414	0.08078	-1.688808	0.1106
D(D2)	0.084447	0.10335	0.8171	0.4259
D(@TREND())	-0.022389	0.00815	-2.747201	0.0143
ECM(-1)	-0.766315*	0.21878	-3.502714	0.0029

\*, \*\*, and\*\*\* indicates statistically significant at 1%, 5% and 10% respectively

Source: Author Computation, based on MOFED, NBE and UNCTAD data 2016

As it indicated in the table 5.5 above the ARDL estimate of short run coefficient indicates that the change of lag 3 export performance have statistically positive significant at 5% level of the change of export to GDP ratio of the country. This show that in short run 1 percent change in D (LNEXGDP (-3)) leads to 0.210182 percent change in D(LNEXGDP) keeping the effect of other explanatory variables constant. While real GDP was found insignificant to affect the export performances of the country in short run period. Other explanatory variables like the change in real openness of the economy (D(LNIXGDP)) and change in foreign direct investment to GDP ratio (D(LNFDIGDP))

directly affects the change in export to GDP ratio of the country ( $D(LNEXGDP)$ ) in short run period keeping the effect of other independent variables constant. On the other hand the real effective exchange rate negatively affects the export performance of the country in short run period and it is statistically significance at 5% level of significance. But the other variables of the indicators of trade taxes, infrastructural development and policy and regime change variables have no significant effect on export performance of the country in short run even at 10% level of significance.

The error correction model coefficient (ECM (-1)) the model was found to be -0.766315 with negative sign and statistically significant at 1% level of significance. It holds that, 76.63% of disequilibrium from the previous year's shock converges back to the long run equilibrium in the current year, and the model will back to its long run equilibrium after probably after 1.5 year. This shows the model has relatively high speed of adjustment.

#### **5.6. Post Estimation Diagnostic Test for the ARDL Model**

To depend on the validity of the ARDL model estimate of long run and short run models, it is paramount to conduct the post estimation test. Accordingly, serial correlation, multicollinearity, Heteroscedasticity, model misspecification test and model stability is conducted to ensure that the important assumption of the ARDL estimates are not violated. The result of these tests is demonstrated as follows:

**A. Multicollinearity Test:** As it is explained in chapter three the existence of strong multicollinearity problem is detected using correlation matrix among the independent variables included in the model. According to Asteriou and Hall (2007) if the correlation coefficient among the explanatory variable is greater than 0.9 indicates the existence of strong multicollinearity in the model.

As it is depicted in appendix 2 the correlation coefficient among the explanatory variables is less than 0.9 implying that there is no strong collinearity among the explanatory variables and this indicates that there is no sever multicollinearity problem in the model.

**B. Serial Correlation Test:** One of the assumptions of the classical linear regression model is that, the error is assumed uncorrelated across the time. In violation of this

assumption, the OLS estimators are inefficient, so no longer BLUE. Hence, to assert the BLUE estimate of the OLS, Breusch-Godfrey Serial Correlation LM Test is conducted against the  $H_0$  saying that there is no a serial correlation problem and  $H_1$  implying that the existence of the serial correlation problem. Accordingly, the LM version of this test (observed R squared) was 4.12 with probability of 0.12 and hence it is statistically insignificant at 5% meaning that the  $H_0$  cannot be rejected and therefore there is no serial correlation problem in the ARDL estimates (see appendix 3).

**C. Test for Heteroscedasticity:** One of the assumptions of the CLRM is the disturbance term is homoskedastic, meaning that it has equal variance. The violation of this assumption results the OLS estimator inefficient. Hence, to detect the problem of Heteroscedasticity, Brush-pagan LM test is used to examine the null hypothesis saying that the error is homoskedastic and the opposite is true for alternative hypotheses. The LM version of this test (observed R squared) was 16.806 with probability of 0.66 or 66% and hence it statistically significant insignificant at 5% level of significance, as a result, the null hypothesis cannot be rejected meaning that there is no Heteroscedasticity problem in the ARDL model (see appendix 4).

**D. Model Misspecification Test:** To ascertain the correct specification of the regression model, the Ramsey RESET test is conducted and the result is depicted in appendix 5 table. Since the P- value, the LM and F version of this test is greater than 0.05 the null hypothesis saying that the model is correctly specified cannot be rejected.

**E. Model Stability Test:** Stability test of the model is conducted by using CUSUM and CUSUMQ of recursive residuals. The CUSUM and CUSUMQ plot or zigzag did not cross the upper and lower bound of straight-line critical value given at 5% level of significance implying that the model is stable (see appendix 6).

Since there is no problem multicollinearity, serial correlation, Heteroskedasticity, model misspecification and model instability we can rely on the ARDL estimate of long run and short run coefficients.

## CHAPTER SIX

### CONCLUSION AND RECOMMENDATION

#### 6.1. Conclusion

Exports are crucial for economic growth and maintain favorable trade balance. There are benefits of export that can be achieved from export trade. Such benefits are increasing foreign export earning, enhancing factor productivity, efficient resource allocation, and greater capacity utilization via economics of scale.

Currently many African countries have been working towards export to increase their export share in the international market .In Ethiopia tremendous efforts have been made to promote export sector especially in the transitional and EPRDF governments. However, the export promotion in the country during the derg regime was characterized by over valuation of exchange rate, high tariff rates and other non tariff barriers. These policies were influencing the profitability and competitiveness in the international market.

The total export growth during the derg regime was characterized by ups and downs which were highly skewed to negative growth. The share of export to gross domestic product was low and accounts 7.42 percent on average. More over the capacity of export to finance import was low. In relation to the commodity composition of export coffee was the lion share in total export during the whole periods of the derg regime. The existence of political instability, the drought, the war together with high restrictions on trade policies resulted to the low performance of export earnings during this regime.

Following the downfall of the Derg regime in the last 24 years the government conducted export policy reforms. Several measures have taken to promote export .such as export rate devaluation, revision of tariff laws, licensing procedures was simplified, duty draw back schemes, dutch auction system and access of pre-shipment loan at minimum interest rate. Similar to the derg regime the total export growth rate during post 1991/92 was trended as ups and downs but skewed to positive. However, the share of export to gross

domestic products was remarkably improved except in the earliest and the last periods of the post 1991/92. During this time capacity of export to finance have revealed the largest gap than that of the derg regime periods. This was due to the enhancement of demand of capital goods for the construction of mega projects that are crucial for the development and sustainability of the country.

With regard to the marketing strategies, it is found that most of the exporters in the country do not implement the theoretically advocated marketing mixes such as product strategy, price strategy, promotional strategy, place strategy and export entry strategies. Instead, they are running their export business in a very traditional manner where they lack skilled and professional manpower, technology and finance to effectively and efficiently implement the devised marketing mixes. Therefore, it is assessed that such poor implementation might have an impact to the export performance of the country.

In relation to inferential statistics the main macro factors real GDP, openness of the economy and foreign direct investment affect export performance of the country positively and significantly in both long run and short run periods.

On the contrary, real effective exchange rate and trade taxes are adversely affect the export performance of the country .However; infrastructure development and the dummy variable of policy change have insignificant effect on the export performance of the country, both in the short run and long run periods.

## **6.2. Recommendation**

Based on the finding of this study, the researcher recommends the following inputs for the concerned body:

- Most of the export reforms were focused on change in export legislation; the attention given to institutional reform is low. In addition, capacities building for exporters and for the administrative staffs are also low. Hence, the government should design institutional reform to improve the capacity of export sector.
- The lion share of the export earning is obtained from the coffee commodity which is unprocessed raw material and non value added commodity. Even though many efforts have been done to transform the structure of the economy from agricultural

commodity to Manufacturing commodity the commodity composition has continued to be dominated by coffee.

Therefore, the government should strength, its effort towards diversifying the commodity export to industrial sector. So that sectoral transformational can able to be achieved.

- The export commodity composition is skewed to agriculture sector in pre 1991/92 and post 1991/92. However, export of primary product is risky and leads to uncertain circumstances. Besides agriculture sector is highly depend on rain fall in which the sector does not have government incentive packages.

Therefore exporters should shift from agriculture sector to manufacturing sector.

- Exporters should have to hire skilled and professional advisors so as to properly implement the theoretically recommended marketing strategies which include; product strategy, price strategy, promotional strategy, place strategy and export entry strategies.

- Real effective exchange rate is negatively affects the export performance of the country. The trend of the real effective exchange rate has been increased almost by 20 times during the last 24 years. However real effective exchange rate affects the export performance negatively and significantly.

Therefore, government should take lessons in deciding currency devaluation and control the quality of export products to be price elastic in the international market.

- This study did not consider the micro factors that affect the export performance. Hence, further study is required to examine the effect of these variables on the export performance of Ethiopia.

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## Appendices 1: ARDL Estimate, Bound Test and Long run and Short Coefficients

Dependent Variable: LNEXGDP

Method: ARDL				
Sample (adjusted): 1979 2015				
Included observations: 37 after adjustments				
Maximum dependent lags: 4 (Automatic selection)				
Model selection method: Akaike info criterion (AIC)				
Dynamic regressors (2 lags, automatic): LNFDIGDP LNIXGDP LNREER LNRGDP LNTGDP LNCETCGDP				
Fixed regressors: D1 D2 C @TREND				
Number of models evaluated: 2916				
Selected Model: ARDL(4, 0, 1, 0, 2, 2, 2)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNEXGDP(-1)	0.326237	0.174717	1.867231	0.0803
LNEXGDP(-2)	0.038477	0.110024	0.349714	0.7311
LNEXGDP(-3)	0.079153	0.088966	0.889699	0.3868
LNEXGDP(-4)	-0.210182	0.074739	-2.812206	0.0125
LNFDIGDP	0.143457	0.048715	2.944811	0.0095
LNIXGDP	1.105529	0.172037	6.426101	0
LNIXGDP(-1)	-0.34047	0.257144	-1.324045	0.2041
LNREER	-0.23008	0.106291	-2.164628	0.0459
LNRGDP	-0.024273	0.286439	-0.08474	0.9335
LNRGDP(-1)	-0.267099	0.292115	-0.914363	0.3741
LNRGDP(-2)	0.550108	0.261206	2.106031	0.0513
LNTGDP	-0.08584	0.113243	-0.758016	0.4595
LNTGDP(-1)	-0.066264	0.109718	-0.603944	0.5543
LNTGDP(-2)	-0.145473	0.109721	-1.325854	0.2035
LNCETCGDP	-0.013478	0.066069	-0.203994	0.8409
LNCETCGDP(-1)	0.063859	0.068079	0.938007	0.3622
LNCETCGDP(-2)	-0.082146	0.068077	-1.206659	0.2451
D1	-0.136414	0.080775	-1.688808	0.1106
D2	0.084447	0.103349	0.8171	0.4259
C	-1.963002	1.750304	-1.12152	0.2786
@TREND	-0.022389	0.00815	-2.747201	0.0143
R-squared	0.990665	Mean dependent variable	2.275165	
Adjusted R-squared	0.978997	S.D. dependent variable	0.355177	
S.E. of regression	0.051473	Akaike info criterion	-2.798704	
Sum squared residual	0.042392	Schwarz criterion	-1.884399	
Log likelihood	72.77602	Hannan-Quinn criterion	-2.476368	
F-statistic	84.90351	Durbin-Watson stat	1.625896	
Prob(F-statistic)	0.000			

ARDL Bounds Test				
Sample: 1979 2015				
Included observations: 37				
Null Hypothesis: No long-run relationships exist				
Test Statistic	Value	k		
F-statistic	4.09468	6		
Critical Value Bounds				
Significance	Lower Bound	upper Bound		
10%	2.53	3.59		
5%	2.87	4		
2.50%	3.19	4.38		
1%	3.6	4.9		
Test Equation:				
Dependent Variable: D(LNEXGDP)				
Method: Least Squares				
Sample: 1979 2015				
Included observations: 37				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNEXGDP(-1))	0.075284	0.15585	0.483056	0.6356
D(LNEXGDP(-2))	0.055989	0.120862	0.463251	0.6494
D(LNEXGDP(-3))	0.179834	0.107461	1.673484	0.1137
D(LNIXGDP)	1.306632	0.189713	6.887405	0
D(LNRGDP)	0.223676	0.318323	0.702671	0.4924
D(LNRGDP(-1))	-0.479619	0.35723	-1.342606	0.1981
D(LNTGDP)	-0.097913	0.13963	-0.701229	0.4932
D(LNTGDP(-1))	0.0673	0.136222	0.494047	0.628
D(LNCETCGDP)	-0.012571	0.082182	-0.152966	0.8803
D(LNCETCGDP(-1))	0.059642	0.083155	0.717242	0.4836
D1	-0.083048	0.097517	-0.851627	0.407
D2	-0.057629	0.114238	-0.504462	0.6208
C	-3.208253	2.258935	-1.42025	0.1747
@TREND	-0.024152	0.011613	-2.079789	0.054
LNFDIGDP(-1)	0.03825	0.064687	0.591306	0.5626
LNIXGDP(-1)	0.971947	0.41741	2.32852	0.0333
LNREER(-1)	-0.258174	0.149391	-1.728183	0.1032
LNRGDP(-1)	0.354229	0.183239	1.933155	0.0711
LNTGDP(-1)	-0.276609	0.1764	-1.568076	0.1364
LNCETCGDP(-1)	0.020881	0.193523	0.107899	0.9154
LNEXGDP(-1)	-0.954002	0.332535	-2.86888	0.0111

### ARDL Estimate of Long run Model

Selected Model: ARDL (4, 0, 1, 0, 2, 2, 2)				
Dependent Variable :LNEXGDP				
Regressors	Coefficient	Std. Error	t-Statistic	Prob.
LNRGDP	0.33764**	0.13784	2.44951	0.0262
LNIXGDP	0.99836*	0.2734	3.65171	0.0022
LNREER	-0.3002***	0.16368	-1.8343	0.0853
LNFDIGDP	0.1872**	0.0824	2.27181	0.0373
LNTGDP	-0.3883***	0.22372	-1.7357	0.1018
LNCETCGDP	-0.0415	0.20304	-0.2042	0.8408
D1	-0.178	0.11028	-1.6141	0.126
D2	0.1102	0.15276	0.7214	0.4811
C	-2.5616	2.03007	-1.2618	0.2251
@TREND	-0.0292	0.01271	-2.2986	0.0353

\*, \*\*, and\*\*\* indicates statistically significant at 1%, 5% and 10% respectively

Source: Author Computation, based on MOFED, NBE and UNCTAD data 2016

### ARDL Estimate of Short Run Dynamic Coefficient and the Error Correction Model Coefficient

Selected Model: ARDL(4, 0, 1, 0, 2, 2, 2)				
Independent Variable	Dependent Variable: D(LNEXGDP)			
	Coefficient	Std. Error	t-Statistic	Prob.
D(LNEXGDP(-1))	0.092552	0.11854	0.780751	0.4463
D(LNEXGDP(-2))	0.131029	0.08323	1.574253	0.135
D(LNEXGDP(-3))	0.210182**	0.07474	2.812206	0.0125
D(LNRGDP)	-0.024273	0.28644	-0.08474	0.9335
D(LNRGDP(-1))	-0.55010***	0.26121	-2.106031	0.0513
D(LNIXGDP)	1.105529*	0.17204	6.426101	0.000
D(LNREER)	-0.23008**	0.10629	-2.164628	0.0459
D(LNFDIGDP)	0.143457*	0.04872	2.944811	0.0095
D(LNTGDP)	-0.08584	0.11324	-0.758016	0.4595
D(LNTGDP(-1))	0.145473	0.10972	1.325854	0.2035
D(LNCETCGDP)	-0.013478	0.06607	-0.203994	0.8409
D(LNCETCGDP(-1))	0.082146	0.06808	1.206659	0.2451

D(D1)	-0.136414	0.08078	-1.688808	0.1106
D(D2)	0.084447	0.10335	0.8171	0.4259
D(@TREND())	-0.022389	0.00815	-2.747201	0.0143
ECM(-1)	-0.766315*	0.21878	-3.502714	0.0029
ECM(-1)= LNEXGDP - (0.1872*LNFDIGDP + 0.9984*LNIXGDP -0.3002				
*LNREER + 0.3376*LNRGDP -0.3883*LNTGDP -0.0415*LNCETCGDP				
-0.1780*D1 + 0.1102*D2 -2.5616 -0.0292*@TREND )				

\*, \*\*, and\*\*\* indicates statistically significant at 1%, 5% and 10% respectively  
Source: Author Computation, based on MOFED, NBE and UNCTAD data 2016

### Appendices 2 Multicollenarity Test Using Correlation Matrix

	LNFDIGCF	LNIXGDP	LNREER	LNRGDP	ITGDP	D1	D2	LNCETCGDP
LNFDIGCF	1	0.87286	-0.69087	0.7401	0.344012	0.787003	0.558931	0.815066
LNIXGDP	0.87286023	1	-0.71549	0.803082	0.560275	0.76934	0.694167	0.838751
LNREER	-0.6908661	-0.71549	1	-0.30879	-0.2819	-0.66692	-0.12482	-0.62731
LNRGDP	0.74010023	0.803082	-0.30879	1	0.434408	0.717676	0.882011	0.831482
ITGDP	0.34401229	0.560275	-0.2819	0.434408	1	0.06363	0.358931	0.558701
D1	0.7870028	0.76934	-0.66692	0.717676	0.06363	1	0.509629	0.733509
D2	0.55893117	0.694167	-0.12482	0.882011	0.358931	0.509629	1	0.696142
LNCETCGDP	0.81506581	0.938751	-0.62731	0.831482	0.558701	0.733509	0.696142	1

### Appendices 3 : Serial correlation Test

Breusch-Godfrey Serial Correlation LM Test:				
F-statistic	0.878841	Prob. F(2,14)		0.437
Obs*R-squared	4.127146	Prob. Chi-Square(2)		0.127
Dependent Variable: RESID				
Method: ARDL				
Sample: 1979 2015				
Included observations: 37				
Presample missing value lagged residuals set to zero.				
Variable	Coefficient	Std. Error	t-Statistic	Prob.

LNEXGDP(-1)	-0.11514	0.240483	-0.478778	0.6395
LNEXGDP(-2)	0.07892	0.127294	0.619983	0.5452
LNEXGDP(-3)	-0.05426	0.10848	-0.500201	0.6247
LNEXGDP(-4)	-0.00155	0.076157	-0.020386	0.984
LNFDIGDP	0.023853	0.055051	0.433287	0.6714
LNIXGDP	-0.08697	0.185508	-0.468816	0.6464
LNIXGDP(-1)	0.193934	0.29973	0.647027	0.5281
LNREER	-0.00972	0.114404	-0.084992	0.9335
LNRGDP	0.02129	0.317805	0.06699	0.9475
LNRGDP(-1)	0.047289	0.296647	0.15941	0.8756
LNRGDP(-2)	-0.03573	0.269696	-0.132479	0.8965
LNTGDP	0.047518	0.151294	0.314073	0.7581
LNTGDP(-1)	-0.06868	0.122102	-0.562447	0.5827
LNTGDP(-2)	0.005059	0.125227	0.040396	0.9683
LNCETCGDP	-0.01068	0.068963	-0.154929	0.8791
LNCETCGDP(-1)	-0.01122	0.083926	-0.133685	0.8956
LNCETCGDP(-2)	-0.01183	0.086687	-0.136419	0.8934
D1	0.003259	0.093261	0.03495	0.9726
D2	-0.00723	0.109873	-0.065766	0.9485
C	-0.42126	1.926933	-0.218617	0.8301
@TREND	-0.0027	0.008686	-0.311215	0.7602
RESID(-1)	0.407749	0.466302	0.874431	0.3966
RESID(-2)	-0.38185	0.475875	-0.802411	0.4357
R-squared	0.111544	Mean dependent var		1.84E-17
Adjusted R-squared	-1.2846	S.D. dependent var		0.034315
S.E. of regression	0.051867	Akaike info criterion		-2.80887
Sum squared resid	0.037663	Schwarz criterion		-1.80749
Log likelihood	74.96403	Hannan-Quinn criter.		-2.45583
F-statistic	0.079895	Durbin-Watson stat		1.891367
Prob(F-statistic)	1			

#### Appendices 4 : Heteroskedacity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey				
F-statistic	0.665799	Prob. F(20,16)	0.807	
Obs*R-squared	16.80623	Prob. Chi-Square(20)	0.6655	
Scaled explained SS	3.616799	Prob. Chi-Square(20)	1	
Dependent Variable: RESID^2				
Method: ARDL				
Sample: 1979 2015				
Included observations: 37				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.086741	0.066403	1.306286	0.2099
LNEXGDP(-1)	0.002405	0.006628	0.362878	0.7214
LNEXGDP(-2)	-0.00109	0.004174	-0.26171	0.7969
LNEXGDP(-3)	0.000439	0.003375	0.130192	0.898
LNEXGDP(-4)	0.001928	0.002835	0.680038	0.5062
LNFDIGDP	-0.00015	0.001848	-0.07903	0.938
LNIXGDP	-0.01105	0.006527	-1.69268	0.1099
LNIXGDP(-1)	-0.00321	0.009755	-0.32887	0.7465
LNREER	-0.00738	0.004032	-1.82923	0.0861
LNRGDP	-0.01718	0.010867	-1.58053	0.1336
LNRGDP(-1)	0.00802	0.011082	0.723677	0.4797
LNRGDP(-2)	0.00931	0.00991	0.939478	0.3615
LNTGDP	0.000681	0.004296	0.15847	0.8761
LNTGDP(-1)	-0.00558	0.004162	-1.3409	0.1987
LNTGDP(-2)	-0.00152	0.004163	-0.36464	0.7202
LNCETCGDP	0.004561	0.002507	1.819452	0.0876
LNCETCGDP(-1)	0.002589	0.002583	1.002481	0.331
LNCETCGDP(-2)	0.004768	0.002583	1.846248	0.0834
D1	0.00048	0.003064	0.156658	0.8775
D2	0.006445	0.003921	1.643892	0.1197
@TREND	-0.00045	0.000309	-1.46398	0.1626
R-squared	0.454222	Mean dependent var		0.001146
Adjusted R-squared	-0.228	S.D. dependent var		0.001762
S.E. of regression	0.001953	Akaike info criterion		#####
Sum squared resid	6.10E-05	Schwarz criterion		-8.42801
Log likelihood	193.8329	Hannan-Quinn criter.		-9.01998
F-statistic	0.665799	Durbin-Watson stat		2.829375
Prob(F-statistic)	0.806987			

## Appendices 5: Model Misspecification Test

Ramsey RESET Test				
Equation: UNTITLED				
Specification: LNEXGDP LNEXGDP(-1) LNEXGDP(-2) LNEXGDP(-3)				
LNEXGDP(-4) LNFDIGDP LNIXGDP LNIXGDP(-1) LNREER LNRGDP				
LNRGDP(-1) LNRGDP(-2) LNTGDP LNTGDP(-1) LNTGDP(-2)				
LNCETCGDP LNCETCGDP(-1) LNCETCGDP(-2) D1 D2 C @TREND				
Omitted Variables: Squares of fitted values				
	Value	df	Probability	
t-statistic	0.313792	15	0.758	
F-statistic	0.098466	(1, 15)	0.758	
F-test summary:				
	Sum of Sq.	df	Mean Squares	
Test SSR	0.000276	1	0.000276	
Restricted SSR	0.042392	16	0.002649	
Unrestricted SSR	0.042115	15	0.002808	
Unrestricted Test Equation:				
Dependent Variable: LNEXGDP				
Method: ARDL				
Sample: 1979 2015				
Included observations: 37				
Maximum dependent lags: 4 (Automatic selection)				
Model selection method: Akaike info criterion (AIC)				
Dynamic regressors (2 lags, automatic):				
Fixed regressors: C @TREND				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNEXGDP(-1)	0.288939	0.215585	1.340254	0.2001
LNEXGDP(-2)	0.025939	0.120103	0.215976	0.8319
LNEXGDP(-3)	0.073334	0.093443	0.784797	0.4448
LNEXGDP(-4)	-0.17582	0.133846	-1.31356	0.2087
LNFDIGDP	0.116501	0.09947	1.171209	0.2598
LNIXGDP	0.953118	0.516985	1.843607	0.0851
LNIXGDP(-1)	-0.31333	0.27848	-1.12515	0.2782
LNREER	-0.20611	0.133446	-1.54452	0.1433
LNRGDP	-0.02791	0.295095	-0.09459	0.9259
LNRGDP(-1)	-0.2214	0.334115	-0.66265	0.5176

LNRGDP(-2)	0.478119	0.35346	1.352679	0.1962
LNTGDP	-0.07164	0.125048	-0.57291	0.5752
LNTGDP(-1)	-0.06223	0.113677	-0.54741	0.5922
LNTGDP(-2)	-0.1243	0.131577	-0.94466	0.3598
LNCETCGDP	-0.00076	0.07917	-0.00963	0.9924
LNCETCGDP(-1)	0.064006	0.070084	0.913282	0.3755
LNCETCGDP(-2)	-0.06566	0.087584	-0.7497	0.465
D1	-0.11524	0.107092	-1.07605	0.2989
D2	0.0735	0.111964	0.656458	0.5215
C	-1.52136	2.28634	-0.66541	0.5159
@TREND	-0.02019	0.010931	-1.84714	0.0845
FITTED^2	0.031007	0.098813	0.313792	0.758
R-squared	0.990726	Mean dependent var		2.275165
Adjusted R-squared	0.977743	S.D. dependent var		0.355177
S.E. of regression	0.052988	Akaike info criterion		-2.75119
Sum squared resid	0.042115	Schwarz criterion		-1.79335
Log likelihood	72.89706	Hannan-Quinn criter.		-2.41351
F-statistic	76.30902	Durbin-Watson stat		1.582198
Prob(F-statistic)	0			

## Appendices 6: Model Stability test

