



SEEK WISDOM, ELEVATE YOUR INTELLECT AND SERVE HUMANITY !



Addis Ababa University

College of Business and Economics

MBA Programme

The Impact of Export Incentives on Export Growth in Ethiopia

A Thesis Submitted in partial fulfillment of the requirements for the Degree of
Master of Art in Business Administration

Submitted By: - TewodrosAssefaWolde

ID No. – GSD/0109/08

Advisor: -Ato G/Medhin G/Hiwot

Addis Ababa, Ethiopia

June, 2019

Statement of Declaration

I, TewodrosAssefaWolde, hereby declare that this Master thesis "Impact of Export trade incentive on Export Growth of Ethiopia" is my original work. I have carried out the present study independently with the guidance and support of the research advisor Ato G/Medhin G/Hiwot. Any other research or academic sources used here in this study have been duly acknowledged.

I further confirm that this study has not been submitted for the award of any degree or diploma program in this or any other institution.

TewodrosAssefa	_____	_____
Name of Author	Signature	Date

Statement of Certificate

This is certify that this master's thesis entitled "Impact of Export trade incentive on Export Growth of Ethiopia" submitted by TewodrosAssefa is his own work and has been submitted for examination with my approval as a university advisor.

G/Medhin G/Hiwot _____

Name of Advisor

Signature

Date

Addis Ababa University
School of Graduate Studies

This is to certify that the thesis prepared by TewodrosAssefa, entitled: Impact of Export trade incentive on export growth in Ethiopia and submitted in partial fulfillment of the requirements for the degree of Master of Arts in Business Administration complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

APPROVED BY BOARD OF EXAMINERS

External examiner: _____ Signature _____ Date _____

Internal examiner: _____ Signature _____ Date _____

Advisor: _____ Signature _____ Date _____

Chair of Department: _____ Signature _____ Date _____

ACKNOWLEDGEMENTS

First and foremost, I would like to thank the Almighty God, for giving me the strength for the finalization of this thesis. Secondly my special thanks forward to my advisor, Ato G/Medhin G/Hiwot for his guidance andComments throughout the development of this study.

Finally, I express my deep gratitude to my beloved family especially my wife EmbetAsmare, my friends Samson Eshetu, AmhaKebede and all friends for providing me with reliable support and continuous encouragement throughout my years of study and through the process of researching and writing this thesis. This accomplishment would not have been possible without them.

Abstract

Considering the rapid and dynamic growth of international trade and market competitiveness in our world, the Ethiopian government introduces and implements fiscal and non fiscal scheme to promote and encourage export trade. The aim of this research paper is the impact of export trade incentive on export growth of Ethiopia from 2003-2018. In this study using explanatory research method combined with trend analysis and time series analysis, we presented finding, results and conclusion by using secondary data which were collected from main actors from government institutions like Ethiopian Revenue and Customs Authority (ERCA), National Bank of Ethiopia (NBE), Ministry of finance and economic development (MOFED), Development Bank of Ethiopia(DBE). Based on the time series statistical regression analysis , the study found that fiscal incentives(voucher scheme) and financial incentives(Export credit guarantee) and REER are statistical significant with export growth where as the other independent variables Duty drawback and Manufacturing bonded warehouse were statistically insignificant for export growth. The study also suggests that care should be taken to improve the implementation of incentives and formulation of incentive policies. Otherwise Without these improvements the incentive schemes cannot achieve their expected levels of effectiveness.

Keywords: Ethiopia, Export, Export Trade incentive, Export growth, fiscal incentives, financial incentives.

Table of Contents

Page No.	
	Acknowledgements.....I
	Abstract.....II
	Acronyms.....III
	List of Tables.....IV
	List of Figures.....V
1.	Chapter One: Introduction.....1
1.1	Background of the study.....1
1.2	Statement of the problem.....2
1.3	Research questions.....3
1.4	Objectives of the study.....3
1.4.1	General objectives.....3
1.4.2	Specific objectives.....4
1.5	Hypothesis Development.....4
1.6	Significant of the study.....4
1.7	Scope and limitation of the study.....5
1.8	organization of the paper.....5
2.	Chapter Two: Literature Review.....6
2.1	Theoretical literature.....6
2.1.1	The Role of export on Economic growth.....6

2.1.2 Definition of investment incentives.....	8
2.1.3 Objective of investment incentive.....	10
2.1.4 Classification of Export Incentive.....	11
2.1.4.1 Fiscal Incentives.....	12
2.1.4.1.1 Fiscal incentives in developing countries.....	14
2.1.4.2 Financial incentives.....	18
2.2 Empirical Evidence.....	20
2.2.1 Empirical evidence of Export Trade Incentives on Export Growth.....	20
2.3 Research Gap.....	24
2.4 Conceptual framework of investment incentives.....	25
3. Chapter Three: Research Design and Methodology.....	27
3.1 Research design.....	27
3.2 Target Population and sample size.....	27
3.3 Data and data collection Method.....	28
3.4 Source and type of data collected.....	28
3.5 Method of data analysis.....	28
3.6 Definition of variables.....	29
3.6.1 Dependent variable.....	29
3.6.2 Independent variable.....	29
3.7 Measurement of variables	32
3.8 Model Specification.....	32

4. Chapter four: Data Presentation and Analysis.....	34
4.1 Trend Analysis.....	34
4.1.1 Trend of tax forgone through Export trade incentive.....	35
4.1.2 Share of Export Earning By fiscal incentive user.....	37
4.1.3 Ethiopian Export Performance.....	39
4.1.4 Annual export growth of Ethiopia.....	40
4.1.5 Trend of Ethiopian Export destination	41
4.1.6 Ethiopian export as a percentage of GDP.....	43
4.1.7 Ethiopian Export Performance by Different sectors.....	44
4.2 Descriptive Analysis of the data.....	46
4.3 OLS Basic Assumption Test.....	47
4.3.1 Unit Root test.....	48
4.3.2 Multicollinearity.....	49
4.3.3 Normality test of residuals.....	49
4.3.4 Autocorrelation test.....	50
4.3.5 Heteroscedasticity Test.....	51
4.3.6 Model stability diagnostic test.....	51
4.4 Discussion of Time series regression results.....	53
4.4.1 Explanatory power of the model.....	54
4.4.2 Statistical test results from OLS Models.....	54
4.4.3 Summary of Findings.....	56

5. Chapter Five: Conclusion and Recommendations.....	57
5.21 Conclusion.....	57
5.2 Recommendation.....	58
5.3 Recommendation for Further Research.....	60

Acronyms

AGOA	African Growth Opportunity Act
COMESA	Common Market for Eastern and Southern Africa
Cusum	Cumulative Sum of Recursive Residual Test
DBE	Development Bank of Ethiopia
EIA	Ethiopian Investment commission
ERCA	Ethiopian Revenue and Customs Authority
ECG	Export Credit Guarantee
EBA	Everything But Arms
GDP	Gross Domestic product
NBE	National Bank of Ethiopia
MOFED	Ministry of finance and economic Development
OLS	Ordinary Least Square
UNCTAD	United Nations conference on Trade and Development

List of Tables

Table 2.1 Fiscal Incentives in Developing Countries.....	14
Table 3.1 Measurement of variables and expected sign.....	32
Table 4.1 Share of Fiscal incentive users for total export.....	37
Table4.2 Summaries of Descriptive statistics.....	46
Table 4.3 Unit root test at level form.....	48
Table 4.4 Unit root test at first difference.....	48

List of Figures

Figures 2.1 Conceptual framework.....	25
Figures 4.1 Trend of tax forgone through export trade incentive.....	35
Figures 4.2 Trend of export growth in birr.....	39
Figures 4.3 Trend of Export to annual growth in Percentage.....	40
Figures 4.4 Trend of Export destination.....	41
Figures 4.4.1 trend of export destination by continent.....	42
Figures 4.5 Trend of Export as a percentage of GDP.....	43
Figures 4.6 Trend of Export performance by sectors.....	44
Figures 4.7 Correlation result among independent variables.....	49
Figures 4.8 Normality test of residuals.....	50
Figures 4.9 Breusch-Godfrey Serial Correlation LM Test.....	50
Figures 4.10 Heteroskedasticity Test: White.....	51
Figures 4.11 testing parameters stability using Cusum and Cusum square of test.....	52
Figures 4.12 Regression results.....	53

CHAPTER ONE

Introduction

This study intended to examine the impact of export trade incentives on export growth in Ethiopia. The purpose is to have the broad understanding of impact of export trade incentive on export growth in the country. This chapter provides background of the study, statement of the problems, main and specific objectives of the study, research questions, hypothesis, significance of the study, Scope and limitation of the study and finally organization of the research paper.

1.1 Background of the study

Economic development is one of the main necessities for every society in the world and economic growth is fundamental to economic development. Export is considered to be as one of the very important contributor for economic growth. Enhancing export is one of the main priorities of any government to raise the momentum of economic growth and development (Ahmed, 2015).

Export facilitate the exploitation of economies at a large scales, allows resource allocation, improve foreign exchange reserves position ,guarantee easy financing of imports, increase employment and allow knowledge spill over to encourage domestic innovation and increase efficiency and productivity through competition.

The achievement and build of strong economic growth is one of the main objectives for all countries. Different countries establish and implement trade policies and strategies in order to achieve sustainable economic growth by increasing export. Among the strategies given by several countries to stimulate and enhance their export performance is export incentive.

Export incentive is the most important tools to promote export. The main aim of export incentive is to contribute to the overall economy of growth and development of the country by increasing the total export commodities.

Investment incentives have been around for over 100 years. In the 19th century America, cities offered money to railroads in order to have the railway pass through them (Sbragia, 1996). But it was only in the late 20th century that governments around the world began offering direct grants,

tax breaks, training funds, free infrastructure and other inducements to attract corporate investment.

Since 1992 the government of Ethiopia introduces and implements new trade export incentive schemes (Duty Drawback, a Voucher System and Bonded manufacturing warehouses) to promote exporters, accelerate industrial growth of the country, improve foreign exchange earnings, transform industry led economy as well as to create favorable environment for domestic products in order to compete in the international market. The establishment of export trade incentives creates the opportunity for expanding of Ethiopian export in the international market.

Even though the incentive schemes have its own contribution for growth of export, it is necessary to know how the incentive scheme proclamation boosts Ethiopian export performance since the scheme establishment.

Therefore, the study will focus on the impact of export trade incentive on export growth in Ethiopia since the incentive schemes were put in place.

1.2 Statement of the problem

Increasing export is one of the main determinants of economic growth for both developed and developing countries. Because Export trade is a major economic engine for both developed and developing countries and plays vital role for the country by earning foreign currency, creates international relation, solve balance of payments, create employment opportunity, promoting economic development, knowledge transfer and, etc.

Most developing countries including Ethiopia have provided different financial and fiscal incentives schemes in federal and regional administration level in order to encourage and attract exporters in the country. Ethiopian government also established export trade incentives schemes through proclamation No. 69/1993(which is later amended by proclamation 249/2001, No.543/2007 and proclamation No.768/2012) to encourage exporters and boost export performance of the country.

Despite these efforts, Ethiopian export performance becomes below expectation. According to Ministry of Trade and National Bank of Ethiopia (NBE, 2016/2017) annual report, Export

growth had relatively remarkable growth for the years 2009/10-2010/11 with average of 37.76%. In the contrary; this growth did not last long and declined for the last six years. For example, the average export growth in the year 2011/12 to 2014/17 falls to 7.1% with a growth of 1.77% record in the year 2016/17 period alone.

Moreover, Ethiopian export is highly dependent on non-manufacturing products. For example the share of export on agricultural products for the period 2009/10-2016/17 is 73% whereas the share of manufacturing export for the period 2009/10-2016/017 is only 11%. According to Ministry of trade and National bank of Ethiopia (NBE, 2016/2017) annual report data export revenue of the country are highly dependent on few products mainly coffee, Khat, oil seeds, flowers and pulses accounted 79.4% on average of the total export.

According to World Bank and IMF (2017), report Ethiopian export has shown remarkable growth in terms of value, volume and export diversification. However, compared to other African countries export performance of the country is still very low. Ethiopian export goods and services cover 12% of GDP compared to an average of 28% of other sub Saharan African countries (IMF Regional Economic outlook, 2017). So by considering the gaps mentioned in above statement, this paper tries to show the impact of export trade incentive on export growth in Ethiopia from 2003-2018 to come up with reliable information that helps for concerned parties to take corrective actions on major findings.

1.3 Research Question

This study targeted to answer the following research questions:-

- ✓ Do Export trade incentive schemes play a significant role for the growth of export in Ethiopia?

1.4 Objectives of the study

1.4.1 The General objectives of this study are impact of export incentives on export growth of Ethiopia.

1.4.2 Specific objectives of the study

- ✓ To view the trend of total exports and tax forgone from export trade incentive for the period 2003-2018.
- ✓ To analyze the impact of export trade incentives on export growth in Ethiopia.
- ✓ Draw conclusion and suggest policy implications for concerned bodies.

1.5 Hypothesis Development

Since this study examines the impact of export trade incentive on export growth in Ethiopia for the period 2003-2018, we formulate the following hypothesis to test the relationships between each independent variables with export growth (Dependent Variable).The variables and the research hypothesis are presented as follows:

H₀1 Voucher scheme incentive has positive effect on export growth.

H₀2 Duty drawback has positive effect on export growth.

H₀3 Manufacturing bonded warehouse has positive effect on export growth.

H₀4 Financial Incentive has positive effect on export growth.

1.6 Significance of the study

The finding, recommendation and conclusion stated in this study are expected to provide valuable information for customs Authority and investment agencies to evaluate and monitor the impact of present and future export trade incentives. On the other hand, the findings of this study could be used as a reference material for future research in the area of export incentive and growth, particularly in Ethiopia.

1.7 Scope and limitation of the study

This research paper aims impact of export incentive on export growth of Ethiopia. Therefore the scope of this study will focus on export incentive on export growth of the whole Ethiopia.

The main limitations of this study are shortage of time and exclusive dependency of secondary data. Therefore, further study may be worthwhile prior to policy action based on finding of this research.

1.8 Organization of the paper

This paper is organized and presented in five chapters. The first chapter will present back ground of the study, statement of the problem, objectives of the study, Hypothesis development, and significance of the study, scope and limitation of the study. Chapter two presents review of related literature and chapter three presents' data and methodology. Data presentation and Analysis is presented in chapter four and finally conclusion and policy recommendation of the study is presented in chapter five.

CHAPTER TWO

Review of Related Literature

This chapter discusses the theoretical and empirical Literature review. Under the theoretical literature review the role of export on economic growth, definition of investment incentives, classification of export incentives are presented and Empirical evidence of export trade incentive on export growth is presented in the empirical literature review. Research gap and conceptual framework are presented followed Empirical literature review.

2.1 Theoretical Literature

2.1.1 The Role of Export on Economic growth

Trade in general and export in particular, has played positive contribution for economic growth. Early economist Adam smith outlined in his classical theory, by opening of extensive market export raises the productive powers, employment, real output and capital in the economy (Adam smith, 1776).following Adam smith, Ricardo (1877) suggest that, the composition of trade is determined by the international difference in relative output ratio factor or comparative advantage.

On the other hand the neoclassical theory suggest that export plays major contribution for economic growth of one country by fostering specialization, helps to benefit from comparative advantage, utilizing full capacity of plant size, greater benefits of economies of scale, increasing rate of investment and technological change.

Giles and Williams (2000:2) emphasize that the neoclassical stand has been that growth of Hong Kong, Singapore, Korea, Taiwan, Malaysia and Thailand was propelled by export led growth. According to Felipe (2003:6) Germany, China, Japan and Taipei are miraculous countries which were able to expand output as well as employment through ELG.

Krueger (1980, 288) countries adopting export oriented strategy have in most cases grown rapidly and have seen expanding in tradition exports and nontraditional exports. (kissing,1979:Balassa,1983:Kruger,1978,1980 and Bhagwati,1978i) indicate in their studies that nations which adopted outward oriented development strategies faired better in terms of

economic growth, employment, economic efficiency and adjustments to external shocks than those engaged in inward-looking strategies.

Similarly Balassa (1986) and Dollar (1992) also argued that outward-oriented developing economies attain definitely much more rapid growth than inward-oriented developing ones.

Khan and Zahler(1983) outward-oriented strategies have been characterized by the provision of incentives of production, encouragement of import competition for most domestically produced goods and the use of floating exchange rate.

Export development is highly observed by policy makers and researchers due to the important macroeconomic and microeconomic benefits derived from external trade. From the micro economic point of view exporting can allow national economies to enrich foreign exchange reserves, create and provide employment, create backward and forward linkages and guide to standard of living Czinkota, Rivoli and Ronkainen (1992).

Similarly Coutts and Godley (1992) suggest that economies need to export goods and services in order to generate revenue to finance imported goods and services which cannot be produced indigenously.

Samad (2011:92) explains exports are part of the determinants of GDP because a rise in export increases GDP or output, everything else remaining unchanged. In other words an increase in export directly increases employments in exporting industries which in turn leads to a raise in GDP. In addition to this exports support foreign exchange generation and in turn facilitate the importation of intermediate and capital goods which stimulate domestic growth.

On the other hand Torstar and Sarthy(1994) explain the importance of exporting in the case of microeconomic, exporting can give individual firms a competitive advantage, increase capacity utilization, improve their financial position and increase technological standards.

Export expansion promotes economic growth through increase in total factor productivity. According to Feder (1983), Krugman(1985), Chuang(1988), Reizman et al(1996) expansion in export may promote specialization in sectors for country has comparative advantage, can increase productivity by offering larger economies of scale, increase competitiveness, facilitate transfer of knowledge, international market, managerial and technological skills.

Export sales increase, other things being equal, the GDP of a nation will rise and provide a stimulus to improve economic well being and society prosperity. Marin (1992) explained the relationship of export and GDP that export performance has a simulating effect throughout a country in the form of technological spillovers, support product and process innovation activities, increases specialization by encourage profitable exploitation of economies of scales. According to ZafarU.Ahmed et al. (2006)in 1998 the export-GNP ratio for Malaysia was 84.3% indicating how much the Malaysian economy relies on export.

Broadly speaking, the expansion of a countries export has positive effect for the growth of one country economy. Export is important for one country's economic growth. Export boosts profitability, provides employment, improves trade balances, and improves nation's living standard, increases knowledge spill over.

2.1.2 Definition of Investment incentives

Investment incentives are measurable economic advantages that governments provide to specific enterprises or groups of enterprises, with the goal of steering investment into favored sectors or regions or of influencing the character of such investments. These benefits can be fiscal (as with tax concessions) or non-fiscal (as with grants, loans, or rebates to support business development or enhance competitiveness).

According to Zahir (2003), incentive for investment is associated with lots of benefits if allowed to operate. Some of the benefits that are derivable from a successful incentive regime include, among others, offering incentives to boost those sectors that are strategically crucial for promoting export, generating employment, developing skill and adding value to domestic activities.

Holland and vann(1996) stated that developing and transitional countries offer incentives for purpose of promoting investment. The incentives are often directed to foreign investors on the ground that there is sufficient domestic capital for desired level of economic development and that the international investment brings with modern technology and management technique.

The work ability of incentives depends on some factors namely: the circumstances of the economy, the competence of the tax administration, the type of investment being encouraged and the budgetary constraints of the government. Therefore, an effective and efficient incentive must have been the ability to stimulate investment in the desired sector or location, with minimal revenue leakage, and provides minimal opportunities for tax planning, it must be transparent and easy to understand, and must have specific policy goals.

Incentives must not be subject to frequent change, and must provide investors with certainty over its application and longevity. It must be developed, implemented, administered and monitored by a single agency, and must have low administrative costs for both governments and firms. In addition, it must be followed-up and monitored in order to ensure that the incentive criteria are met. According to UNICTAD (2000) incentives imply financial as well as Administrative costs if incentives are designed, granted, implemented and follow up of compliance by firms that have benefited from the incentive measures. The four broad steps involved in incentive police by United Nations conference on Trade and Development (UNICTAD, 2000) are:-

2.1.2.1 Incentive design

The very first step required in designing incentives are ,we should have to clearly list and analyze the market imperfections and the extent of the imperfections that the incentives are designed to reduce or eliminate. The costs of granting incentives can then be compared to the benefits of removing or reducing the imperfections. Otherwise the cost of administering the incentives can be hard to manage (James, 2010).

2.1.2.2 Incentives should be granted automatically

Eligibility for incentives provided by law should be based on clear criteria, not granted through special permission or certification by investment promotion agencies, ministries of trade, or other government agencies. This approach ensures prompt decision making and quick turnaround times for investors essential to attracting and retaining investment. This step also can slightly show the investment environment i.e. the corruption level or office bureaucracy.

2.1.2.3 Implementation

The tax administration should ensure that investors receiving tax incentives satisfy the requirements for them. To enable them to do so, it should be compulsory for tax returns, declarations, and relevant forms to be filed regularly for investors to receive tax benefits. Tax incentives should not be used as an excuse to avoid tax administration, information, audits, and any other compliance requirements. Fiscal authorities are advised to devote sufficient measures to prevent firms from using incentives to facilitate tax avoidance and evasion (Eisner, Albert & Sullivan, 1984).

2.2.2.4 Follow up

Periodic review of the incentives by Governments offers a potential double benefit. On the one hand, it can help Governments prevent revenue leakage by eliminating excessive incentives or unnecessary tax breaks to investors. On the other hand, it can help them update incentives packages to provide real value to investors that will attract more investment.

2.1.3 Objectives of Investment Incentive

The aim of investment incentive is to increase nation's revenue by attracting foreign and domestic investors by creating favorable investment conditions. According to UNICTAD (2000) the objectives of investment incentives are:-

2.1.3.1 Regional Investment

Countries often employ a mix of incentives to channel investment for development of a particular area of region. Regional development objectives include support rural development (electricity, roads, telephone and water supply, education, etc), building industrial centers outside major cities and reducing environmental hazards, over-urbanization and concentration of population.

2.1.3.2 Sectoral Investment

Countries employ tax incentives in order to promote sectors of industry or activities considered crucial for development. These may be targeted at mining and industrial parks, export-led activities, the film industry and businesses with new technologies.

The majority of tax incentives granted by developing countries relate to investment in manufacture, exploration and extraction of mineral reserves, promotion of export and, increasingly, the tourism and leisure sectors.

2.1.3.3 Performance enhancement

Incentives can be targeted at many types of activities, such as export promotion, employment/skills training, and domestic value added and headquarters location. Free trade zones (FTZs) typically cover incentives for export-oriented manufacturing.

2.1.3.4 Technology Transfer

An important objective of using incentives to attract investment to developing countries is the transfer of technology. This helps domestic firms to be more competent for the international market and also professional they will get knowledge of hi tech technologies easily without going abroad. Furthermore, governments can save foreign currency that is spent for training and other related costs.

2.1.4 Classification of Export Incentives

According to WTO (2006) defines export subsidies as a benefit –conferred by the government to a firm that is contingent on exports. An Export subsidy can be in the form of Government transfer to selected entities (Cash subsidy, tax exemption, duty suspension, preferential tax treatment, etc), a regulatory policy (like protection of border, border tax adjustment, etc) and the provision of public goods at no cost below market price for exporting firms.

Incentives are frequently used as a policy instrument to attract FDI and to benefit from it. They can be classified as financial, fiscal or other incentive. Incentive can be a tool for countries to pursue their development strategies. If used properly, they can compensate for some deficiencies in the business environment that cannot easily be remedied. It can also correct the failure of markets to capture wider benefits from the externalities of production and divert the financial resources that could otherwise be more effectively used for development purposes (UNCTAD, 1996).

According to UNCTAD (1996a, 1996b) and WTO (1998) fiscal incentives, financial incentives and other incentives are classified as follows:-

2.1.4.1 Fiscal Incentives

Fiscal incentives are considered as an important element of economic policy simulation used in most countries, especially in developing economies to attract domestic and foreign investment. According to the United Nations conference on Trade and Development (UNCTAD, 2000), fiscal incentives are chosen by most developing countries because they serve as measures for reducing the burden on investment under taking and a means to induce foreign investors to invest in specific sectors or location in an economy.

Furthermore, Philips (1996) stated that fiscal incentives are common in developing countries because the incentive has no direct drain on the government resources. Fiscal incentives are used to increase the after tax returns of companies in the form of tax holidays and depreciation allowance. Fiscal incentives describes as a tax concession or non –fiscal benefits in the form of grants, loans or rebates to support business development and enhance competitiveness.

Fiscal incentives describes as tax and non-tax incentive. Tax incentives provide indirect support to investors in the form of tax breaks, access to subsidize credit and lower customs tariffs and on the other hand non-tax incentives offer direct support to investors in the form of construction and rehabilitation of infrastructure and facilities (Built of export processing zone and Industrial zone).

According to Zee, Stotsky&Lee (2002) fiscal incentives sometimes classified as statutory and effective. Statutory fiscal incentives are specialized tax reduction granted to qualified investment projects from other reduction applicable to investment projects in general where as effective fiscal incentive described as special tax provision granted to qualified investment projects which has the effect of lowering the effective tax burden.

Fiscal incentives to investments however are not without cost. The most obvious cost would be forgone revenue. But if fiscal incentives are properly designed and administered and are ultimately able to achieve the ends for which they were created, then those forgone revenues shall have been offset by the expanded tax base that those investments have created. The idea is

to forgo revenue today in order to encourage investments that will in turn spur employment, exports, upstream and downstream linkages, and economic growth, which all in all will provide government a wider array of economic activities that it can tax. However, if those fiscal incentives are ill-designed or improperly administered, then the country will find no future economic activity to offset the forgone revenue.

According to Kuewuni (1996) argues that fiscal incentives are revenue loss to the government; therefore if such incentives are not properly paying attention the revenue loss could be harsh. Fiscal incentives used for export activities are the following:-

- **Duty exemption and Duty drawbacks:** - In duty exemption scheme, exporters are exempted from paying duties or indirect taxes on imports in the production of goods that are subsequently exported. By comparison, a duty drawback scheme refunds the duties and indirect taxes that were paid on imported inputs used in producing the exported products. A firm imports an input which is used in the production of an export product; the payment applicable for imported duties and indirect taxes for the imported input is either waved (in the case of duty exemption) or refunded to the exporters once the final product is exported (in the case of duty draw back).

Duty draw back Schemes are quite cumbersome because Duty exemption/drawback requires strong administrative abilities otherwise export incentive through this instrument can have unaffordable costs. Although most tax benefits targeting EP have been prohibited by the WTO subsidies code, duty drawback not exceeding the amount of duty actually levied on the imported product has been permitted.

- **Export Processing Zones(EPZ) and Bonded Manufacturing Warehouse(BMW):**

These two instruments are formed to separate export activity from domestic market restriction. EPZ are intended to facilitate by providing services like water, power, telecommunication, containerized cargo facilities and the processing of imported materials for export. EPZ ensures the quickest access to free trade to exporters within designated area.

According to Oyejide A (2007) the policy measure built into the EPZ zone includes realistic exchange rate, free access to raw materials, inputs and capital goods at world price, easy access

to investment licensing and financing the creation of export production, generous and long term tax holidays and concessions as well as no limitation on foreign ownership of the firms or the repatriation of profits. EPZ are not effective to promote export unless infrastructure and other facilities are provided adequately.

According to Di Maio(2009) explained that most countries experiencing EPZs, for attraction of foreign firms primarily committed to advantage of tax treatments and because of this reason positive effects have not materialized at a national economy wide level.

2.1.4.1.1 Fiscal Incentives in developing countries

Assessing the relative advantages and disadvantages of fiscal incentives is a complicated and controversial issue (James, 2009). The main difficulty in assessing their benefits is in determining if incremental investment is indeed the result of incentives. It is generally recognized that incentives are not the prime determinant of investment decisions. If investment is in fact the result of incentives, difficulties arise in quantifying the positive effects, such as technology transfer or creation of employment, and possible negative effects, such as economic distortions or potential for corruption.

According to UICTAD (2000) the legal instruments granting tax incentives are drafted carefully so that they achieve policy objectives with a minimum leakage of tax revenue. They are expressed as precisely as possible so as to avoid the need for frequent corrections or changes. It is believed that frequent changes could contribute to the perception that the tax system is complex and difficult to comply with. Apart from the tax incentives regime, stability and predictability of the tax system are major factors influencing firms when they commit to long term investment.

Table 2.1 shows The types of fiscal incentives granted by developing countries with incentive period along with its advantage and disadvantage are summarized below:-

Incentives	Description	Advantages	Disadvantages	Developing countries Example
Reduced corporate tax	lower corporate tax	Distortions minimized	has to be below 35% to be	All \leq 30%: Botswana, Korea, Nepal, Nigeria,

Rate	rates	longer benefit period flat tax rates reduce confusion	effective rewards old capital	Peru, Singapore, Sri Lanka, Tanzania, Uganda Flat tax rates: Poland, Romania, Russia, Slovakia, Uzbekistan
Sectoral incentives	reduced corporate tax rates for certain sectors/ activities	signaling effect of government commitment easier to implement	May distort market	Botswana, Brazil, Ecuador, Egypt, Ethiopia, Ghana, Korea, Lesotho, Mauritius, Nepal, Nigeria, Peru, Philippines, Singapore, Sri Lanka, Tanzania, Uganda, Uzbekistan
Tax holidays	period of tax exemption/ reduced tax	flexible, can be used to targets certain industries immediate benefit to income-earning firms	discretionary approach → distortions, potential for mismanagement favors existing firms over start-ups can lead to tax leakage and avoidance through	(Years in brackets) Brazil (15), Ecuador (20), Egypt (5-20), Ethiopia (1-5), Ghana (5-10), Kenya (10), Korea (5) , Mauritius (10), Nepal (5-10), Nigeria (3-5), Philippines (5), Singapore (5-10), Sri Lanka (5), Tanzania (2-5), Uganda (10), Uzbekistan (7)

			transfer pricing rewards short term investment in 'footloose' industries	
Investment tax allowances/credits	tax credit/ allowance for investment expenditure	Supports expansion in existing firms encourages long term investment less revenue leakage		Ecuador (tourism), Korea (6-10%), Mauritius (antipollution), Mexico (19-25%), Nigeria (5-20%), Philippines (75-100%), Singapore (33-50%)
Accelerated depreciation	Depreciation deductions are calculated over a shorter time period	Supports expansion in existing firms encourages long term investment less revenue leakage	Eroded by high inflation	Botswana, Brazil , Ecuador (5-10%), Egypt (5-10%), Ethiopia, Ghana (5-20%), Kenya, Korea, Lesotho (5-25%), Mauritius, Mexico, Nepal (5-25%), Peru (3-20%), Rwanda (5-50%), Singapore, Sri Lanka, Tanzania (25-100%), Uganda (5-20%)
Input sales tax	tax credit			Argentina, Chile, Peru

credit	against input sales tax, especially on capital goods			
Loss carry forward	write-off of losses against gross profits of following years			(years in brackets) Botswana (5), Brazil (4), Egypt (5), Ethiopia (3-5), Ghana (5), Kenya (unlimited), Korea (3), Mauritius (unlimited), Mexico (4), Peru (4), Rwanda (5), Singapore (unlimited), Sri Lanka (6), Tanzania (5), Uganda (unlimited)
Export/ import Incentives	exemption on customs duties, zero-VAT rating on exports, export marketing assistance	can be used to target sectors	restricted by trade treaties dependent on capacity of customs administration	Botswana (duty exemptions) , Brazil, Ecuador, Egypt, Ethiopia, Ghana, Korea, Lesotho, Mauritius, Mexico, Nepal, Nigeria, Peru, Philippines, Rwanda, Singapore, Sri Lanka, Tanzania, Uganda, Uzbekistan
Subsidies/	outright grants,	flexible, can be	high upfront	Rural

grants	upfront subsidies and subsidized loans	used to target sectors	costs dependent on capacity of tax administration open to abuse	telecommunication development: Peru, Egypt, Uganda, Nepal
Regional incentives	grants/ tax allowances/ subsidized loans/ infrastructure provision when investing in certain regions	flexible, can be used to target regions	dependent on capacity of regional administration open to abuse	Brazil, Ecuador, Egypt, Ethiopia, Ghana, Mexico, Nepal, Peru, Rwanda, Sri Lanka, Tanzania, Uganda

Table 2.1: Type of fiscal incentives granted by developing countries

(Source: - UNCTAD policy review series; Biggs, 2007, Morisset and pirnia, 2000)

2.1.4.2 Financial Incentives

According to Garcia(2007) explain that the objectives of financial incentives is to allow companies to be able to depend on more appropriate conditions to allow them to face international competitiveness and makes it possible for them to boost their investments. Such incentives are provided in the form of Direct/Indirect Cash subsidies, export credit facilities for pre-shipment and post-shipment transactions, special foreign exchange allocation and remission of tax normally chargeable on profits.

According to UNICTAD (2000), developed countries more frequently employ financial incentives such as grants, subsidize loans or loan guarantees because financial incentives are a direct drain from the government budget.

OyejideA. (2012) explained that financial incentive are autonomous and complementary measures aimed at providing special incentives for export activities that are not necessarily related to any disincentive that would be associated with the prevailing trade, investment and exchange rate regimes. Key among these are special export financing scheme that may be needed to assist exporters in low income countries which lack well developed financial system (Demirkung-kunt and Erzan, (1991);Harrold et al,(1996).

One of the special schemes for special export financing schemes is the provision of easy access to financing at affordable interest rate for exporting activities. According to Erzan (1991) financial access through affordable interest rate enables exporters to eliminate their financial constraints. Moreover, different countries provide financial incentives scheme for helping exporters cope in respect of the risk associated with non-payment by their foreign buyers, as well as their own failure to deliver the ordered goods. Among the financial incentives commonly practiced and granted for exporters are:-

- **Direct Subsidies:** - These exemptions are given to favor export activities like non-traditional exports. All nontraditional exports become eligible for a direct tax exemption but there is an issue of how the subsidy is financed if the subsidy increases the target export and the cost of achieving the increase is corresponding with increase of exports. Latin American country Brazil increases its export by using direct subsidies where as Cost Rica, Mexico, Colombia and Argentina fail to use these subsidies. Similarly like Brazil, East Asians countries Korea and Taiwan registered impressive success with direct subsidies.
- **Credit Subsidies:** - the role of this subsidy is to provide increased access; charge lower interest rates for export financing compared to other credit and extend the maturity for loans to buy capital goods for export activities. Export credit may be in the form of supplier credits (Credit granted by an exporter to a foreign buyer) or a buyer credits (The exporter gets in contract with a buyer which is financed by a loan agreement between a bank in the exporter countries' and a bank in the buyer's country). The aim of this subsidy is to offset a bias against for export financing in underdeveloped market because exporting at early stages are more risky than producing for the domestic market.

Credit subsidies are not the most appropriate instrument to promote export. These subsidies are easy to abuse, more difficult to target and monitor. Most problems rise with credit subsidies are cost associated with perceived high risks, limited information, and poorly developed markets, government policies excluding lending to new exporter customer due to interest, reserve requirement and portfolio controls. Melo,(2001) reports that in Latin America out of 26 countries 14 countries are provided credit subsidies to exporters through their institution .

2.2 Empirical Literature

2.2.1 Empirical Evidence of Export trade Incentives on Export Growth

Several studies are carried out to investigate the contribution of export incentives on expansion and growth of exports in the case of country and firm level. Among the research studies analyzed and presented in different publication and used as an empirical evidence for these studies are:-

During the period of 1962-1980 the Korean government provided fiscal and financial incentives as well as established export promoting organization. As a result of this export values rose significantly. The study indicate that from 1962-1982 the average rate of export growth was about 30% a year with peaks of over 50%.similarity the nation's annual export value extremely reaches from US\$ 55million to US\$27 billion in 1962.the ratio of export to GNP also reaches from 1% to 30% in the 1970's.

Alvarez and Crespo (2000) examine the impact of activities performed by Chile's export promotion agency, PROCHILE using 365 firms a sample out of a population 7,479 exporting firms over the period1992-1996. Based on the result the instrument used by this agency had a positive effect on diversification of products in four years.

Similarly Volpe, Martincus and Carballo (2008) examine the effectiveness of export promotion actions by Peru national agency, PROMPEX using firm level data on exports by product, destination of markets and employment over the period 2001-2005.the result reveal that the export promotion has helped Peruvian firms to increase their exports in terms of their product and destination.

Gorg et al. (2008) analyzes a sample 11,730 manufacturing firm year observation in Ireland over the period 1983-2002 on average of 587 firms per year. The finding of the study conclude that

grants aiming at increasing investment technology, training and physical capital are effective in increasing total exports of already existing firms but not in encouraging new firms in the internal market.

Chandra and Long (2013) using firm level panel data in 2002-2006, find that in China the amount of export increased by 13% of export for each point of increase in vat rebate (there is additional \$4.7 of exports gain for each of \$1 of export tax rebates paid). Similarly, Gordon, Monjon and Poncet (2014) using HS6 product level data for the period 2003-2012, find that in China a one percent increase in vat rebate leads to 7% increase in export quantity (Sevetlana, 2015).

Mah (2007) examines whether duty drawbacks, which China has used since 1985, have had a significant positive impact on its exports. Applying co-integration tests to an annual dataset for 1979–2001, he finds that duty drawbacks do not promote exports to a significant degree. This may be due to inefficiencies such as false reporting, payment uncertainties, and delayed reimbursement of import duties – all of which are often major problems of the duty drawback system in developing countries.

Lederman et al. (2008) analyze 88 developed and developing countries using survey data and the result of the finding revealed that the activities of export promotion agencies have a strong and statistically significant impact on the countries total export volume.

A comparative study on 11 nations (India, Korea, Singapore, Yugoslavia, Mexico, Colombia, Chile, Brazil, Argentina, Taiwan and Israel) was carried out by (Balassa, 1978). In his study he grouped these nations in four groups depending on the timing and the extent of the export promotion schemes practiced by these nations. Mixed findings were established but in general in an inter-country situation; export promotion was associated with economic growth performance, in the individual countries he found out that export promotion schemes accelerated economic growth.

Hashim and Hassan (2008) analyze the effect of fiscal and financial incentives on export by taking surveys of Malaysian small and medium enterprises. The result of the survey showed that a set of incentives offered by The Malaysian External Trade Development Corporation has played a positive role of increasing exports.

Volpe Martincus et al. (2010) in his analysis for the Latin America countries, Costa Rica and Peru incentives helped local firms to increase their export through diversification.

Using data for the period 1964 – 1980 Jung and Lee (1986) showed that a 1% increase in subsidy (which comprise preferential export finance, tariff reduction and exchange rate changes) would bring about 2% increase in the amount Korea's manufactured export supply. However, their measure of export subsidy includes neither export insurance nor duty drawback. In another study, thus, Mah (2006) indicates that duty drawback scheme was effective in promoting export supply of Korea during 1975 to 2001.

A different study done by (Mah, 2006) on export promotion policies in Korea; studied the impact of financial incentives on export programs and establishment of free trade zone on export volumes of Korea; then he found out that the Export promotion policies contributed to the expansion of export values. Exports of manufactured products had increased significantly during the 1960s and 1970s when these schemes were introduced. The share of exports of more value added capital intensive and technology intensive products had risen since the 1970s. According to (Mah, 2006) rapid increase of export values appeared to have led to economic growth of Korea, supporting the export-led economic growth strategy.

Similarly, Wu and Chuang (1998) found that Korea and Taiwan have used duty drawback schemes effectively. Strong administrative ability, and an overriding commitment and determination of leadership to meaningful economic development, which, few less developed countries appear capable of making, are the main factors for the success of Korea (Evans, 1998).

Haque and Kemal (2007) show that over the long run, export financing scheme in Pakistan had a negative effect on exports while the rebate/refund scheme affected exports insignificantly. In Turkey's case, Arslan and van Wijnbergen (1993) find that export incentives and the exchange rate contributed 20 percent to real export growth during 1980–87, where exchange rate depreciation was the most influential factor. Abeyasinghe and Yeok (1998) show that exchange rate changes have less impact in the case of exports with a higher content of imported inputs.

According to Athukorale and Rajapatirana (1993) Latin American countries Colombia and Venezuela has failed to use credit subsidy. The main reason for their failure is that in the Columbian side during the period 1980-1984 the export subsidy target decline when the export subsidy reached on the maximum level on the other hand Venezuela unable to carry out this subsidy because of incurring large foreign debt mostly from export incentive.

Similarly, Nogès (1989) investigated the Latin American export subsidy practice during the 1960th and 1970th. He found that the export subsidies reduced only marginally the anti export bias of Latin American countries since the subsidies were not supported by other policies conducive for export. Particularly, the result stated that export subsidies improved exports in Brazil as well as liberalized imports significantly, stabilize real exchange rate, and promote other policies conducive to export growth.

In the case of Africa due to lack of transparency and monitoring of incentive systems, Administrative bureaucracy and government political tendency export subsidies are not successful to increase export performance except few countries. Harrold et al (2000) is critical of African investment codes which place heavy reliance on fiscal and other incentives which may be largely ineffective in attracting FDI and are at the same time quite costly in terms of lost revenue. It is suggested that the value of investment incentives in many African countries is limited to the extent that both the granting and the nature of the investment incentives granted are variable and discretionary (Pigato, 2001). Thus, while the investment incentives provided are often generous, the associated restrictive provisions and bureaucratic procedures may significantly erode their effectiveness.

Low (1982) documents the failure of subsidy scheme in Kenya is in connection with the poor implementation and the discretionary choices made by the bureaucrats in the allocation of government grants.

Hinkle et al. (2003) Senegal implemented effective programme for refund of vat on domestic and imported inputs used as an input for export. According to his study this measure document has positive effect only these countries and in the rest of other countries the case testifies negative or nil results.

Tanzania established EPZ in 2002 and upgrade specialized EPZ zone by providing taxes exemption for 10 years, vat and other taxes exemption for purchase of inputs, exemption of local government taxes, allowance for 20% of goods to sell in domestic market, access to infrastructure. However the tax exemption cost of the country is high about \$451 million from July 2008-April 2009 and this consequence creates 6.4% of Tanzanian 2009/2010 National budget (Kristi Tuomi, 2012 and Domician, 2009).

According to Clarke, (2005) in most developing countries, the tax system is complex and its burden is borne only by the formal sector that is typical in only a small part of the economic system. Ineffective trade procedures mainly, customs are in many cases more costly than import and export taxes.

Generally, from the above point of view except few studies the majority of the empirical research studies concluded that export promotion policies are contributed great share for expanding of country's export.

2.2 Research Gap

Most of the studies discussed above shows that there were a positive relations ship between export incentive and export growth. However, most of the studies are conducted outside Ethiopia. As to the knowledge of the researcher, in Ethiopian context export trade incentive on export growth has been addressed by few studies such as the effectiveness of export trade incentive on export growth evidence from Ethiopia(Fanta and Teshale, 2014), effectiveness of tax incentive in promoting investment in Ethiopia (MistreDamtew, 2014) and the effectiveness of incentive schemes in promoting export; the case of the Ethiopian trade duty incentive schemes(Senait Seyoum,2007).Most of the studies carried out discussed the implementation and the effectiveness of Major export trade incentive scheme(fiscal and financial incentive) on export growth as a whole.

Therefore, this study intends to fill the gap by going further to employ a more robust econometric analysis in the form of basic OLS assumption tests and trend analysis by Analyzing the impact of Each Fiscal(duty drawback, voucher scheme and bonded Manufacturing warehouse) and Financial (Export trade Guarantee) export trade incentive on export growth in Ethiopia.

2.4 Conceptual Framework

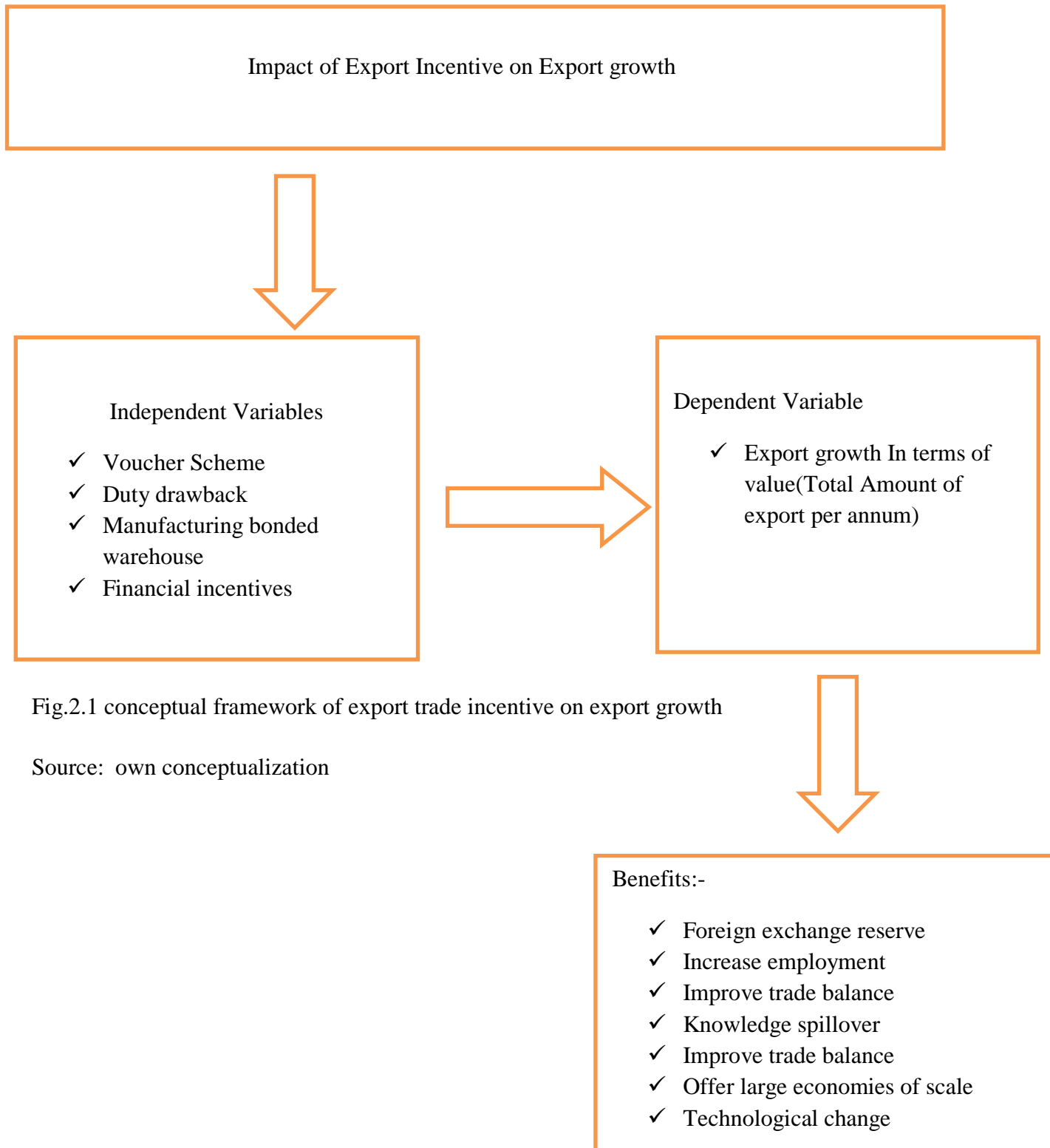


Fig.2.1 conceptual framework of export trade incentive on export growth

Source: own conceptualization

A fig.2.1 show that shows conceptual framework of the impact of export trade incentive on export growth. The figures revealed that independent variables of export trade incentive (voucher scheme, duty drawback, manufacturing warehouse and financial incentives) have positive effect for the growth of dependent variable (export growth).

Finally, the effect of export growth has several benefits for one country like remittance of foreign exchange, increase employment, increase rate of investment, and improve trade balance and technological change.

Chapter Three

Research Design and Methodology

This chapter discusses the research Design and methodology. It contains the research design, target population and sample size, Data and data collection method, source and type of data collected, Method of data analysis, Definition of variable, Measurement of variables and Model specification.

3.1 Research Design

The overall objective of this study, which is the impact of export trade incentive on Export growth of Ethiopia, necessitates using an explanatory research design Approach. In this research, considering the nature of the phenomenon this study has utilized mainly quantitative research approach. Therefore, the study adopted this type of research design and approach to assess in what extent the fiscal incentive and financial incentives granted by the government helped export growth of the country by using quarterly time series data from 2003-2018.

3.2 Target Population and sample size

The population target for this study is the value of annual Export trade incentive granted for exporters by the government and amount of exported commodities for the rest of the world per annum. The samples that have been used are based on time interval by using quarterly time series data from 2003 to 2018. The data collected were related to export value (Dependent Variable), fiscal incentives (duty drawback, voucher Scheme and bonded warehouse), financial incentives (Export Credit guarantee), and real effective exchange rate (Independent variable). All the variables are in terms of Ethiopian Birr (ETB).

3.3 Data and Data Collection Method

This paper is primarily based on secondary data by summarizing relevant research documents, annual reports of National Bank of Ethiopia (NBE), Development bank of Ethiopia (DBE), Ethiopian Revenue and Customs Authority (ERCA), Ethiopia Investment commission (EIC), Ministry of Finance and Economic Development Office (MOFED) and internet websites.

3.4 Sources and Type of Data Collected

The study used export growth as a dependent variable and fiscal incentives (duty drawback, voucher Scheme and bonded warehouse), financial incentives (Export Credit guarantee) and real effective exchange rate as an independent variable. The study employed quarterly data for each variable from the period 2003-2018. Export and fiscal incentives data were collected from Ethiopia Revenue and Customs Authority (ERCA), real effective exchange rate were collected from National Bank of Ethiopia (NBE), and financial incentives were collected from Development bank of Ethiopia (DBE).

The type of data used for this study is quantitative data. Quantitative data consists of numbers that are obtained by using structured and validated data collection instruments and statistically analyzed. Quantitative studies focus on proving or disproving hypotheses in a cause-effect manner by means of taking a close look at pre-defined variables (Shuttle worth, 2008).

3.5 Methods of Data Analysis

The study utilizes a combination of methods including trend analysis and time series econometric analysis. Descriptive analyses were used to show the trend of export incentive and export growth over time in Ethiopia by using percentages, Tables, Charts and Graphs. Econometrics time series statistical data Analysis software will be used to understand and

analyze the overall effectiveness of export incentive on export growth. The study used Eviews software version 9 for data analysis.

3.6 Definition of Variables

In this study export growth is a dependent variable where as Export incentives and real effective exchange rate are an independent variable. Accordingly the following main variables are Defined as follows:-

3.6.1 Dependent variable

Export value:-The total amount of commodities exported for the rest of the world per annum in terms of Ethiopian birr. The dependent variable used in this study is measured as the log of total amount of export value per annum.

3.6.2 Independent Variable

Fiscal incentives:-are incentives granted per annum in the form of Duty drawback, voucher scheme and manufacturing under bonded warehouse.

Duty Drawback Scheme allows exporters to get a refund on customs duty paid on imported goods, where those goods are: to be treated, processed, or incorporated in other goods for export, or are exported unused since importation. Ethiopian Government provided and implements this scheme in 1993. Under this scheme firms importing raw materials for export use get 100% refund of customs duty and tax payments after exported the final product. The independent variable used in this study is measured as the log of total amount of tax forgone for duty drawback users per annum.

A voucher book is a document with a financial value printed by a ministry of finance used as a deposit for duties and taxes allocated on imported raw materials. Raw materials imported under this scheme shall be used for production of export commodity and the export commodity used for production shall be exported within a year starting from receipts of raw materials by the beneficiary. The independent variable used in this study is measured as the log of total amount of tax forgone for voucher scheme users per annum.

Manufacturing under bonded warehouse: _the scheme introduced and implemented in 1993. under this scheme person or firms engaged exclusively in the production of export commodities, obtained eligibility of certificate from ministry of trade and industry and a manufacturing plant meets standard of ERCA. Raw materials imported under this scheme shall be transported to the factory under the control of customs without being subject to payment of duty and correspondingly ERCA inspect raw materials brought into the bonded export factory and goods exported from the factory. Ethiopia has introduced Bonded Export Factory (BEF) and Bonded (Export) Manufacturing Warehouse (B (E) MW) and Bonded Input Supplies Warehouse (BISW) Schemes to avoid the cumbersome bureaucracy involved in customs clearance of imported inputs. The independent variable used in this study is measured as the log of total amount of tax forgone for manufacturing bonded warehouse per annum.

Financial incentives: - are incentives granted per annum to exporters in the form of Export credit guarantee. Export Credit Guarantee (ECG) is a form of insurance cover for political and commercial risk thus enabling exporters borrow corresponding amount of money from banks (Lakew, 2004). According to the revised directive No.SSB/33/2002 of NBE, This scheme are in place to ensure an exporter receives payment for goods shipped overseas in the event of customer defaults, reducing the risks of exporters business and allowing it to keep its price

competitiveness. The guarantee period is up to 365 days to cover pre-shipment export loan extended to exporters and post- shipment guarantee period may extended up to 180 days. The scheme covers all export products except coffee and the interest rate on pre-shipment and post shipment export credit is the prevailing lending rate in each financing bank. The independent variable used in this study is measured as the log of total amount of export credit Guarantee per annum.

Real Exchange Rate: -Real Exchange rates are included in the model to reflect the price competitiveness in the international markets and to ascertain its indirect influence on economic performance via export channel.

The rate of the exchange rate of different currencies is a ratio that specifies how much one currency is worth with respect to other currency. Simply it is the value of foreign currency in term of the domestic currency. The value of the exchange rate affects the demand for export. An appreciation of currency will lead to export becoming more expensive and have a negative impact; in turn, leads to leakage from the circular flow of income, where depreciation of currency causes the opposite effect.

The extent to which exchange change rate affects exports will depend upon the elasticity of demand for the product and the nature of the contract that has been agreed. Mostly, the impact of exchange rate on export is adverse in developing countries like Ethiopia, but its impact changes from country to country, depending upon the macroeconomic policies and international trade. The independent variable used in this study is measured as by taking annual /quarterly exchange rate.

3.7 Measurement of variables

Variable	Measurement(proxy)	Variable Name	Expected sign
EXPVAL	Log of Export value	Export value	
FISINC-DDB	Log of duty drawback	Duty drawback	+
FISINC-VC	Log of voucher scheme	Voucher	+
FISINC-BWH	Log of bonded Warehouse	Bonded warehouse	+
FININC-ECG	Log of Export credit Guarantee	Export Credit guarantee	+
REER	Annual exchange rate	Real effective exchange rate	+

Table 3.1 Measurement of variables and expected Sign

3.8 Model Specification

Following previous empirical researches of Fanta and Teshale(2014), this model utilize five independent variables of Fiscal incentives (FISINC-DDB,FISINC-VC,and FISINC-MBW), financialincentives (FININC-ECG), real effective exchange rate (REER) and dependent variable of export growth (EXPVAL).

Independent variables of Real effective exchange rate(REER) will be treated as Control variables since our study give attention to the relationship between Export Growth (dependent variable) and Fiscal and financial incentives(independent variable).

Therefore, the following models are formulated by assuming the effect of export incentives on export growth.

$$EXPVAL=f(FISINC-DDB,FISINC-VC, \text{ and } FISINC-MBW, FININC-ECG, REER)\dots\dots\dots(1)$$

Based on the above Models, we will develop following econometric models so as to examine and analyze the effect of export incentive on export growth empirically.

$$\text{EXPVAL} = \beta_0 + \beta_1 \text{FISINC-DDB} + \beta_2 \text{FISINC-VC} + \beta_3 \text{FISINC-MBW} + \beta_4 \text{FININC-ECG} + \text{REER} + \mu \dots (2)$$

Where,

EXPVAL: is the amount exportvalue in ETB

β_0 : An intercept of the model

FISINC-DDB: Amount of fiscal incentive in the form of Duty draw back in ETB

FISINC-VC: Amount of fiscal incentive in the form of Duty drawback Voucher Scheme in ETB

FISINC-MBW: Amount of fiscal incentive in the form of Duty draw back Manufacturing Bonded warehouse in ETB

FININC-ECG: Amount of financia incentive in the form of Duty draw back Export credit guarantee in ETB

REER: Export weighted real exchange rate index

μ = Error Term

Chapter Four

Data Presentation and Analysis

This chapter presents the results of trends and the impact of Export trade incentive on export growth of Ethiopia for the period 2003-2018. It is composed of four sections. The first section shows the trend analysis, the second section Descriptive analysis of the data, the third section presents the results of econometric Analysis and the fourth section presents regression results.

4.1 Trend Analysis

Trend analysis is a method of time series data analysis involving comparison of the same items over a significantly long period. The objective of trend analysis is to find the general pattern of a relationship between associated variables and forecast the future direction of the pattern. Therefore, in this section by using graphs and charts, the study attempts to explain and show the trend of export trade incentive, Trend of Ethiopia export performance, Trend of annual export growth percentage, trend of export by destination and Ethiopia export performance by different sectors for the period 2003-2018.

4.1.1 Trend of tax forgone through Export Trade Incentive

Export trade incentive schemes in Ethiopia consist of fiscal and financial incentives, which include duty drawback, Voucher, manufacturing under bonded warehouse and Export credit Guarantee.

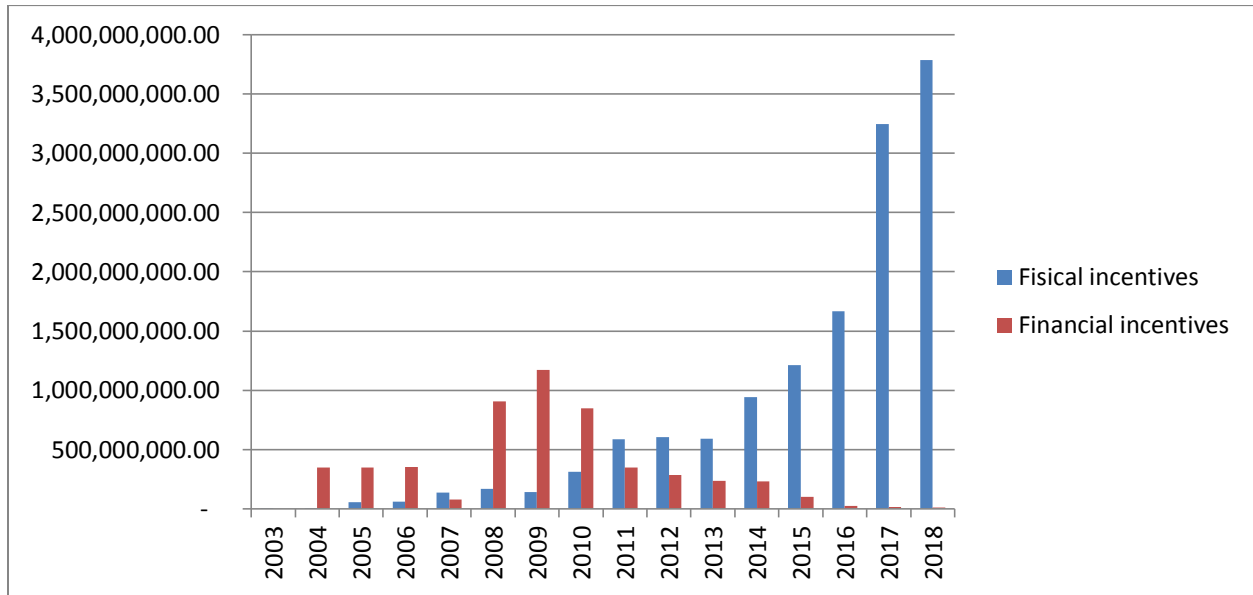


Fig.4.1 Trend of tax forgone through Export Trade Incentive by local currency

Source: Author's calculation based on data from ERCA and DBE

As depicted in Fig.4.1 above, the trend of fiscal incentives granted in the form of duty drawback, voucher and manufacturing under bonded warehouse shows an increasing pattern during the study period. This evidenced by the amount of fiscal incentives granted to exporters increased from 1.2 million birr in 2003 to 3.8 billion birr in 2018. The total amount of fiscal incentives granted to exporters during the study period was 13.5 billion birr. During the study period voucher scheme accounted 85% of the total fiscal incentives and the rest goes to manufacturing warehouse and duty drawback respectively. This implies that the majority of exporters are used the voucher scheme.

Government has provided financial incentive in the form of export credit guarantee (ECG) to exporters since 2004 in order to facilitate local exporters' access to bank credit and enables them not to lose an export market due to inability to get bank credit. The scheme allows financing

banks to approve pre-shipment or post-shipment credit to exporters upon fulfillment of the eligibility criteria set by NBE and their own normal credit risk analysis. As per the above Fig.4.1 the trend of financial incentives in the form of export credit guarantee scheme shows a decreasing pattern despite some fluctuation for the study period. The total amount of ECG provided to exporters during the study period was 5.3 billion birr. The highest loan provision provided to exporters during the study period was 1.1 billion birr which is registered in 2009.

According to DBE (2015) annual report, the numbers of Export credit guarantee users are declined to 7 in 2015 from 66 in 2007. MuluGebryesus (2017), forward his arguments for the decline of export credit guarantee scheme in two different ways. The first, which represents the views of DBE management, is that the scheme has met its objectives by helping exporters to create asset that they can pledge as collateral to get credit. The second argument, which represents experts' view in the banking industry, is that the controversy between DBE and financing banks in claims settlement is the main reason for its decline. NBE directive on ECG allow financing bank to provide revolving credit to exporters during the ECG period so long as the outstanding balance of the loan does not exceed the export credit guarantee issued to cover it. Claims on such revolving export credit, however, are not entrained by DBE as long as the borrowers have received an amount equivalent to the loan guaranteed by the scheme form the first export proceed. Such decision by DBE has led to various controversies between DBE and financing banks.

4.1.2 Share of Export Earning By fiscal incentive user from 2003-2018

Year	Total Export in Birr	Export by Fiscal incentive user in Birr	Share of Fiscal incentive users for Total export by %
2003	5,524,449,741.09	723,150,471.00	13.09
2004	4,779,131,034.21	829,179,234.00	17.35
2005	7,848,036,084.72	718,141,898.00	9.15
2006	8,779,319,003.82	817,257,615.00	9.31
2007	10,705,859,153.53	812,606,324.00	7.59
2008	14,946,000,304.95	716,232,815.00	4.79
2009	17,733,787,812.22	230,863,010.00	1.30
2010	31,274,560,650.76	334,381,212.00	1.07
2011	43,383,663,538.37	997,319,444.00	2.30
2012	47,412,035,299.47	494,172,387.00	1.04
2013	48,711,846,985.77	1,092,559,406.00	2.24
2014	59,985,950,185.36	2,253,722,320.00	3.76
2015	56,050,715,254.11	2,741,347,531.00	4.89
2016	57,401,890,890.92	2,903,759,304.00	5.06
2017	69,323,132,939.22	5,598,870,589.00	8.08
2018	72,712,994,650.00	7,628,423,284.00	10.49

Table 4.1 Share of Fiscal incentive users for total export

Source: Author's calculation based on data from ERCA

Table 4.1 shows the share of exports by fiscal incentive users in the total export. During the study period the trend of share of export by fiscal incentive users for the total export shows an up and down movement. Since the introduction of the incentives, Fiscal incentive users exported 28.9

billion birr out of the total exported amount of 556.86 billion birr. This implies that the average export by fiscal incentive users increased by 6.34% during the study period. The trend also evidenced that export trade incentive foster the share of exports by fiscal incentive users, however the share of exports is not that much satisfactory as many exporters fail to use the incentives. Among the main reasons for the failure is government agencies particularly MOI and ERCA has no standard input output coefficient, which can be used for the calculation of duty and tax refund for exporters, the lengthy process of input output reconciliation, the use of manual based system instead of information technology based system to administer export incentives, unavailability of budget to refund the duty and taxes for those exporters who finalized input output coefficient reconciliation and the inefficiency and lack of government agencies capacity who administer and implement the incentives are cause of exporters to fail the incentive properly. According to MuluGebereyesus and AshagereDemile, (2017) in their research finding they explained that workers assigned by government agencies to administer and implement the incentive scheme have no better understanding for the incentive scheme particularly in the manufacturing sector and due to lack of industry experience they are unable to provide timely report by determine the input output coefficient. Besides, frequently employee turnover from government agencies also makes an obstacle to provide accurate service for the scheme user's efficiently.

Similarly, manufacturing bonded warehouse is introduced to improve infrastructure and customs efficiency particularly to speed up customs clearance of imported inputs for the production of export goods. Though because of the inefficient service provision of ESLSE, the goods are not delivered on time and as a result of this exporters are forced to incur additional cost for delay of raw materials.

In general, apart from above explanation, exporter's lack of awareness about the incentive scheme and readiness to give proper attention for the implementation of the incentive scheme is also extra problem for the fail of the incentive scheme.

4.1.3 Trend of Ethiopian Export Performance

Ethiopia exported 556.86 billion birr for the period between 2003-2018 which on average is birr 34.7 billion birr per year between the period 2003 and 2018. The value of exports under review fluctuated between the highest of birr 72,712,994.650.00 in 2018 and the lowest 4,779,131,034.00 in 2004, ERCA (2018). The figure below shows the trend of export earnings for the period 2003 to 2018.



Fig.4.2 Trends of Export Growth in Birr

Source: Author's calculation based on data from ERCA

4.1.4 Annual Export Growth in Ethiopia

As per Fig. 4.3 the trend of Annual export growth of the country shows an upward trend from 2003-2018.

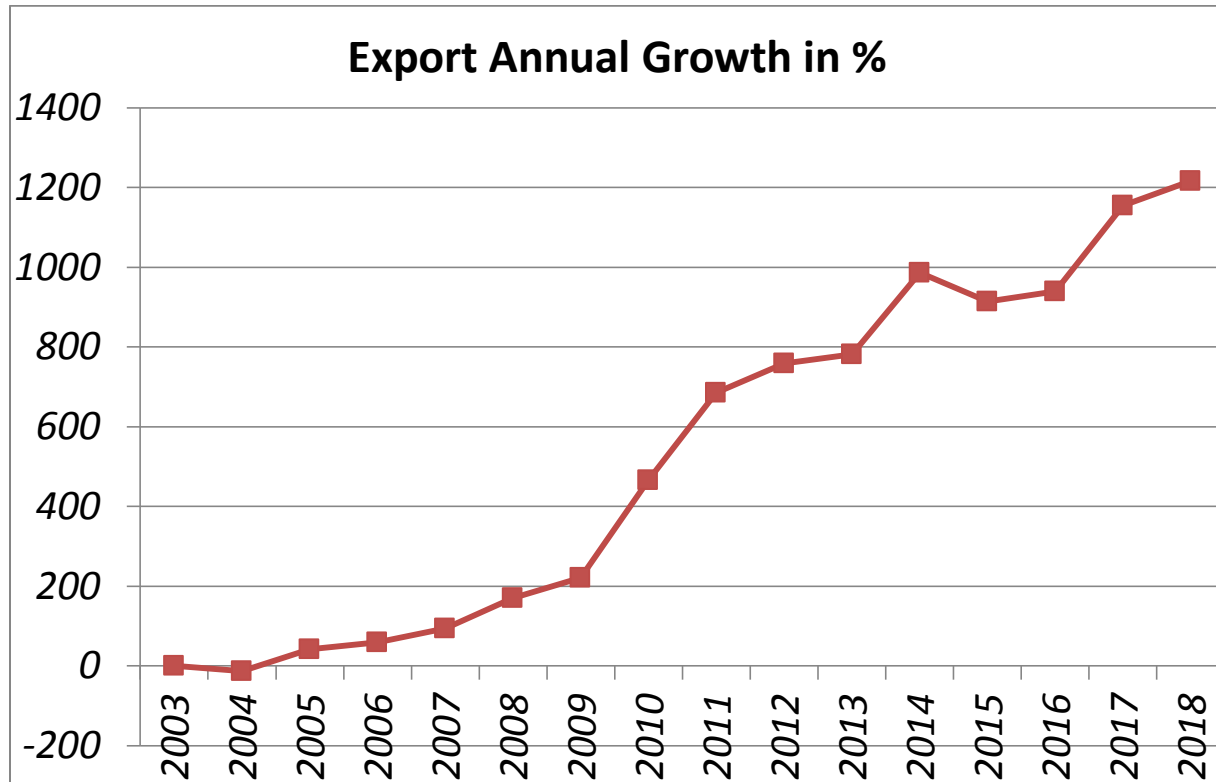


Fig.4.3 Trends of Export to Annual growth

Source: National Bank of Ethiopia

The value of export of goods and service annual growth percentage for the country was -13.49% in 2004. As the above graph shows that in the study period the highest export annual growth is registered in 2018 and the lowest export annual growth is registered in 2004 which was -13.49%.

4.1.5 Ethiopian Export Destination

Market for the country's export has expanded due to international and regional bilateral trade relation. Ethiopia is a member of common market for eastern and southern Africa (COMESA) and has preferential market accesses With USA under Africa growth opportunity act and European Union under Everything but Arms (EBA). This opportunity creates an access for the countries to export its products in different countries. This is evidenced that the number of destination countries of Ethiopian export products shows remarkable growth in the study period except year 2005, 2007, 2008 and 2013 and 2017. The number of export destination countries increased from 97 in 2003 to 145 in 2018. This shows that within the study period the number of export destination countries increased by 45%.

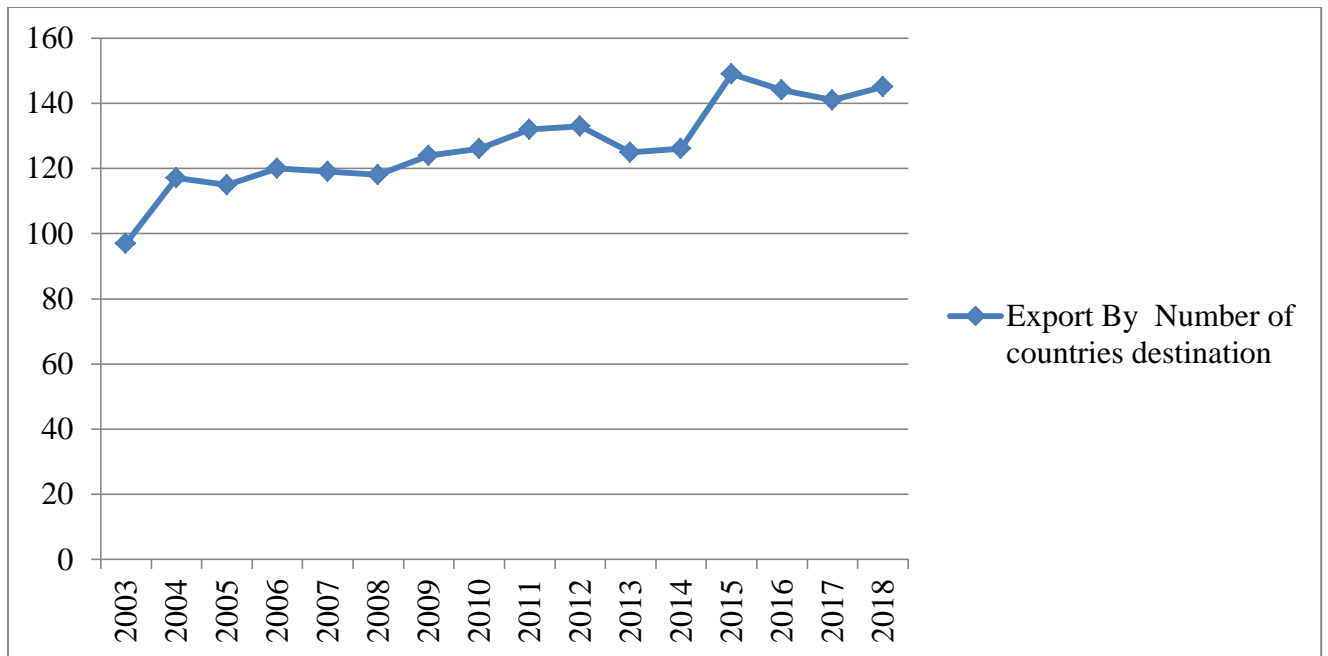


Fig.4.4 Trend of Export Destination

Source Author's calculation based on data from ERCA

Ethiopia major export destination continents are Asia, Europe, Africa and America. According to National bank of Ethiopia annual report (NBE, 2017), out of the total export product Asia covers 38.75%, Europe 28.71%, 21.45% covers Africa and the rest of 11.09% covers other continent.

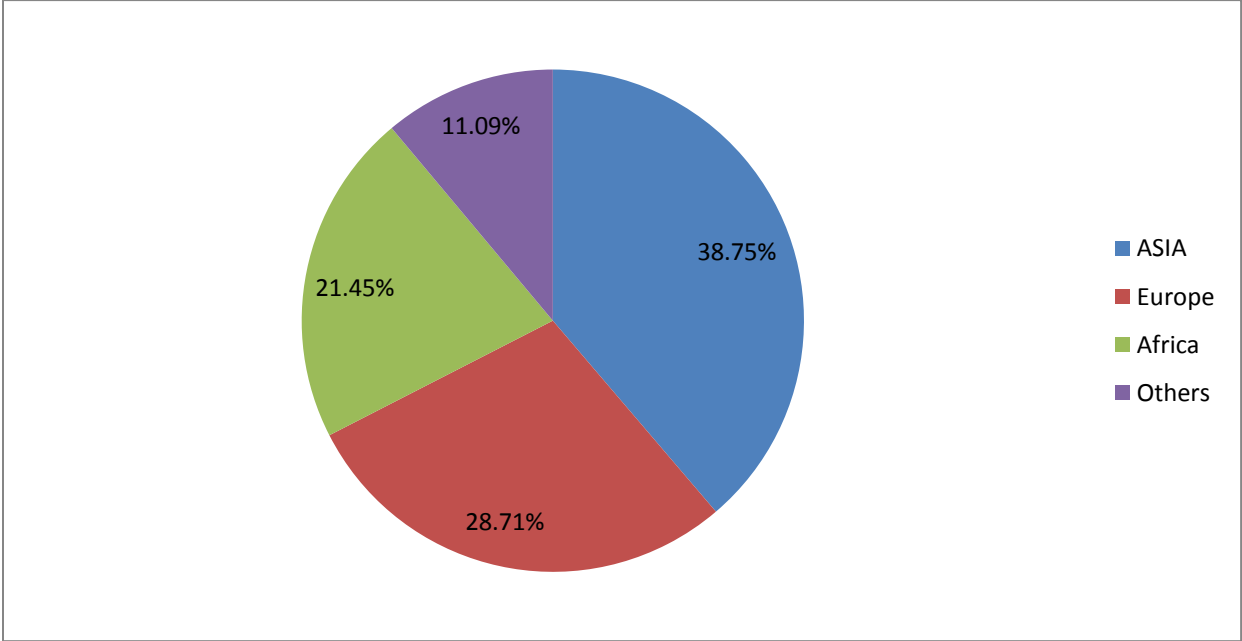


Fig.4.4 .1 Trend of Export Destination by continent

Source Author's calculation based on data from NBE

1.6 Ethiopian Export as Percentage of GDP

The growth ratio of export of goods and services as a % of GDP in Ethiopia shows an up and a downward trend for the study period. As Depicted from the fig.4.5 below indicated that during the study period the export share as % of GDP increases in year (2003-2005 and 2010-2011) and decreases for the rest of stud period (2006-2009 and 2012-2014).The highest Export as a % of GDP is registered in 2005 which was 13% and the minimum export as a% of GDP was -2.1% registered in year 2003. This revealed that the contribution of Ethiopian exports to GDP is still very low.

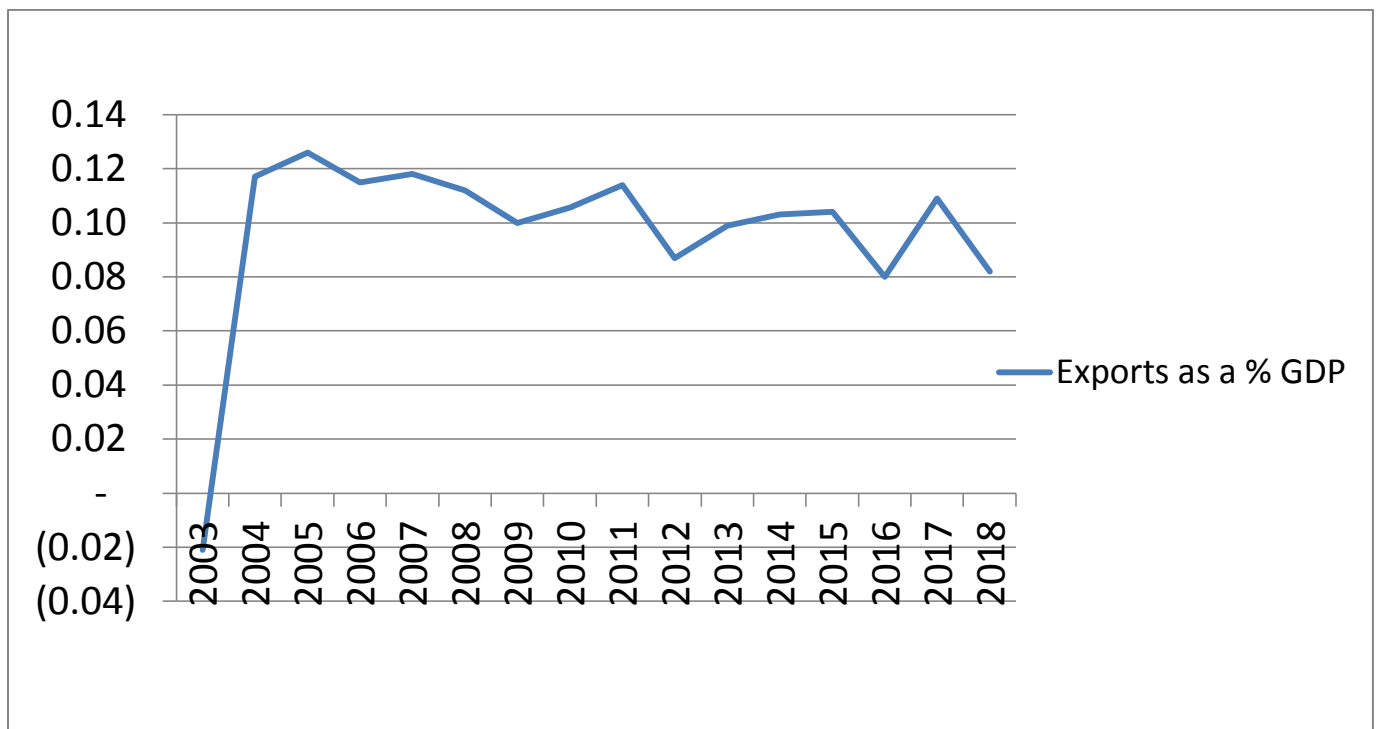


Fig.4.5 Trend of Export as % of GDP

Source: National Bank of Ethiopia

4.1.7 Ethiopian Export Performance By different sectors

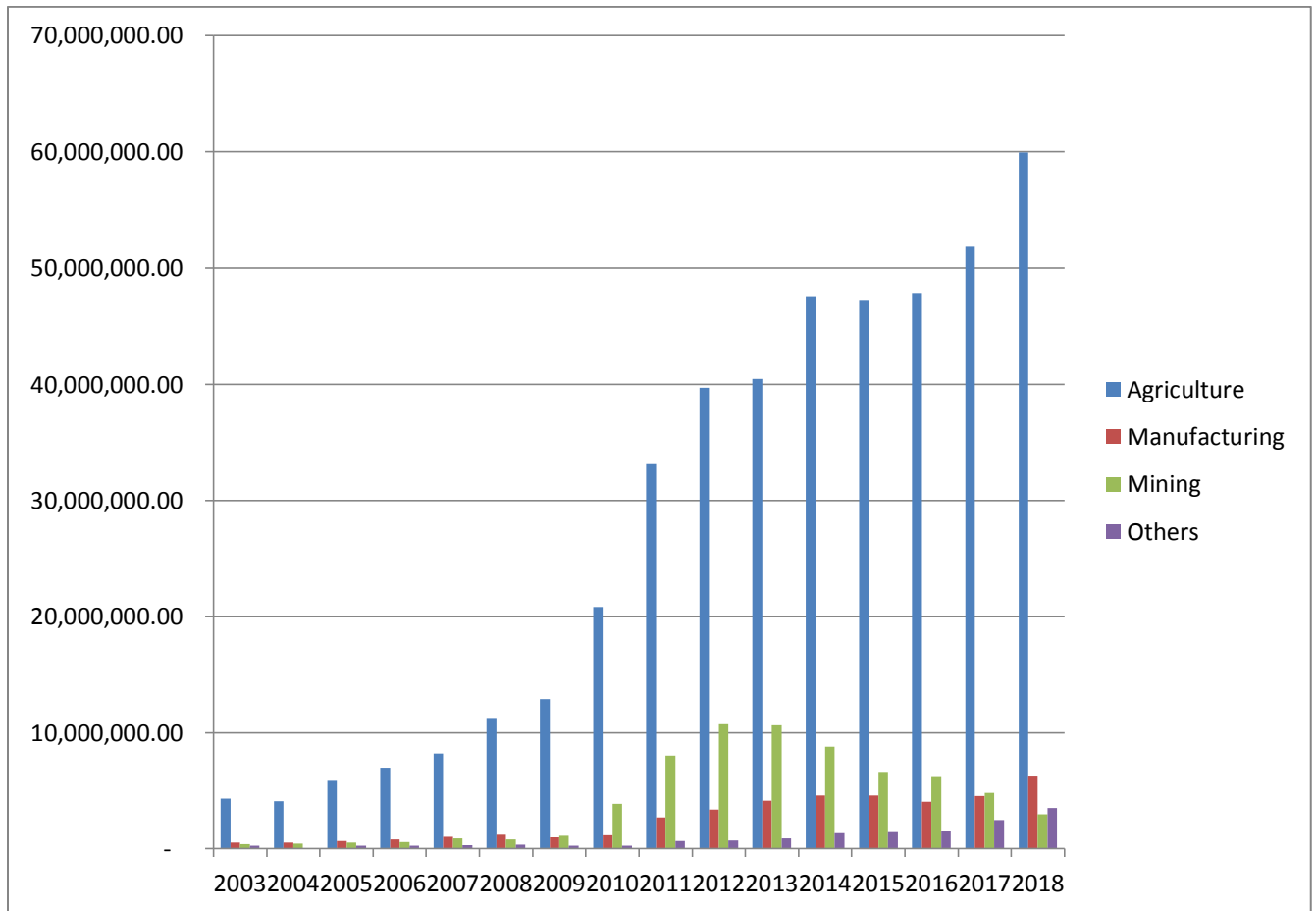


Fig.4.6 Trend of Export performance by Sectors

Source: Author's calculation based on data from ERCA.

As depicted from fig.4.6 Ethiopia major export products are agriculture, manufacturing, mining and others products not categorized in the last three sectors. Ethiopia exported 556.86 billion birr for the period between 2003-2018. Out of the total exported products, Agriculture took the lion shares which is accounted for 78%, Manufacturing 7%, Mining 13% and other export products cover 2%. The trend of export performance shows that the maximum growth in Agriculture, manufacturing, Mining and other products were in year 2018, 2015, 2012 and 2018 respectively on the other hand the lowest growth is registered in 2004 for all export products. This indicates that Agriculture and other export products increased in a positive trend except some years where as the growth of manufacturing and mining sector shows an up and down trend for the study

period. The trend analysis evidenced that Still Ethiopia exports performance are highly dependent of Agricultural products and the share of manufacturing and mining for the export sectors declined year to year.

Generally, the trend analysis revealed that the amounts of fiscal incentives provided by the governments are increased annually. Though, during the study period voucher scheme users consumed 85% of the total fiscal incentive granted by the government and it stood first. This implies that exporters prefer this scheme because the voucher scheme gives the freedom to import raw materials for their export process without any import duty and taxes. In the contrary duty drawback scheme users pay import duty and taxes for imported raw materials used for export purpose and their working capital paid for imported duty and taxes are tied up until the raw materials are exported. Besides, in duty drawback scheme the process to get the refund of import duty and taxes are very lengthy due to coordination problem. Because of all this reason exporters are not daring to use this scheme and as a result Duty drawback scheme users are declined year to year. In the same way, the trend of export share by incentive users also revealed that during the study period share of export by incentive users compare to the total export is insignificant. The reason for this problem is excessive data requirement and implementation of manual based system instead of information technology system based.

On the other hand, the trend analysis evidenced that Ethiopia export performance shows remarkable growth in terms of value and the number of export destination countries also increase annually during the study period. However, Ethiopia export is highly dependent of few primary products and the share of manufacturing products for the export sector is insignificant. This is evidenced that during the study period the share of agriculture covers 78% of the total exported items.

4.2 Descriptive Analysis of the Data

Before we proceed to comprehensive econometric analysis, the study gives brief interpretation of for the nature of variables we use in our regression Analysis. Descriptive statistics of dependent and independent variables in the model can be summarized as presented in table 4-2.

Table 4-2 SUMMUARIES OF DESCRIPTIVE STATISTICS

Statistics	EXPVAL	FININC_ECG	FISINC_DDB	FISINC_MBW	FISINC_VC	REER
Mean	10.38731	8.229897	5.726799	5.784368	8.516212	2.117059
Median	10.56626	8.414798	5.8	5.819924	8.633278	2.115799
Maximum	10.86161	9.0684	7.664726	8.818454	9.431409	2.25
Minimum	9.679349	6.952412	4.391341	0	7.7	1.95
Std. Dev.	0.420228	0.623959	1.058897	2.268943	0.608742	0.090256
Skewness	-0.42867	-0.662868	0.376158	-0.860954	0.010642	-0.40058
Kurtosis	1.624092	2.484303	1.916866	3.647667	1.639501	2.267902
Jarque-Bera	1.752104	1.349015	1.159438	2.256291	1.234274	0.785218
Probability	0.416424	0.509407	0.560056	0.323633	0.539487	0.675293
Sum	166.1969	131.6784	91.62879	92.54988	136.2594	33.87295
Sum Sq. Dev.	2.648869	5.839869	16.81894	77.22152	5.558506	0.122193
Observations	52	52	52	52	52	52

According to Table 4-2, Summary of the above data shows that all variables have positive average as shown in the minimal value. Moreover, Maximum and Minimum rates variations were not observed in all variables except MBW. MBW has a mean of 5.784368 % but there were a great variation between the maximum rates (8.8%) and the minimum rate (0%), this evidenced that MBW has statistically insignificant and contribution to export growth is almost none compare to other incentives scheme.

4.3. OLS Basic Assumption Test

Ordinary Least Square (OLS) is the most basic estimations procedure in econometrics. It is a method for estimating the unknown parameters in a linear regression model using sample data. OLS estimators minimize the sum of the squared errors (a difference between observed values and predicted values). It is important to know the assumption of OLS while doing any econometric test. This is because a lack of knowledge of OLS assumptions would result in its misuse and give incorrect results for the econometrics test completed. Accordingly In this study basic OLS assumption tests and results are discussed below:-

4.3.1 Unit Root Test and order of Co-integration

In order to achieve a meaningful regression with time series data, it is necessary to test the existence of unit roots in the variables. The variables used in the analysis need to be stationary and/or should be co-integrated in order to infer meaningful relationship from the regression. The unit root test provides the order of integration at which the variables can be stationary.

The tests were performed on all series (Export value, fiscal incentives, financial incentives, real effective exchange rate, and Real Gross domestic product) by using the Augmented Dickey-Fuller (1978) (ADF) tests. The ADF test is a parametric test (pre-determined parameters) and it has low power whereas PP test is based on non- parametric modification of Augmented Dickey-Fuller tests.

The results of Augmented Dickey fuller test (ADF) and Phillips-Peron tests (PP) were applied to the variables mentioned in the model of this study at level I (0) meaning testing the existence of unit root of the raw data as it is without differencing and first difference I (1) which means testing the existence of unit root of once differenced data are presented in Table 4.3 and 4.4 respectively.

Table 4-3- Unit Root test at Level Form I (0)

Variable	Level ADF statistic	Level PP statistics	ADF critical value	Conclusion
EXPVAL	-1.169303	-1.169303	@1%: -3.959148 @5%: -3.081002 @10%: -2.681330	Non-stationary
FISINC_VC	-0.147167	1.135195		Non-stationary
FISINC_MBW	-3.068021	-3.136768		Non-stationary
FISINC_DDB	-2.164365	-2.221904		
FININC-ECG	-0.605523	-0.628253		Non-stationary
REER	-2.314564	-2.606452		Non-stationary

The result reported in table 4.3 above indicates stationary test of the variables at level form I(0). The null hypothesis of non-stationary cannot be rejected at 5% level for all of the variables because the critical values ADF and PP values are Greater than the T statistics value of ADF and PP value at 5% . To reject the null hypothesis, ADF and PP test statistics should be greater than the critical value. The result indicates that all the variables had unit root at levels. Therefore, we can conclude that all variables data are non- stationary at level.

Table 4-4 Unit Root test at first difference form I (1)

Variable	First difference ADF statistic	First difference PP statistics	ADF critical value	Conclusion
EXPVAL	-4.156917	-4.099429	@1%: -4.004425 @5%: -3.098896 @10%: -2.690439	stationery@5%
FISINC_VC	-4.370506	-7.010380		stationery@5%
FISINC_MBW	-4.864133	-5.016642		stationery@5%
FISINC_DDB	-3.547221	-3.552020		stationery@5%
FININC_ECG	-4.203263	-4.227628		stationery@5%
REER	-9.228261	-11.70541		stationery@5%

From the result in Table 4-4, the Augmented Dickey Fuller (ADF) and the Phillips-Peron (PP) test statistics for the first differences of all the variables series data were significant at 5% level. This showed that, the series data is stationary at first difference and hence the variables are considered as integrated of order one or I (1) process.

4.3.2 Multicollinearity

Multicollinearity means that independent variables should not correlate one another. If correlation exists between independent variable, then we are in the state of multicollinearity problem. In this case, the regression model will end up with an incorrect or erroneous result and therefore, invalid conclusion will be prevailed. The simplest multicollinearity test is conducted by testing the correlation coefficient between the independent variables. As a rule (rule of thumb), if the correlation coefficient is above 0.75, we should suspect of multicollinearity problems among independent variables (Gujarati, 2004). Therefore, we may conclude that we have no Multicollinearity problem.

Fig. 4.7 CORRELATION RESULT AMONG INDEPENDENT VARIABLES

Covariance Analysis: Ordinary

Date: 06/17/19

Sample: 52

Included observations: 52

Correlation	FININC_ECG	FISINC_DDB	FISINC_MBW	FISINC_VC	REER
FININC_ECG	1.000000				
FISINC_DDB	-0.430258	1.000000			
FISINC_MBW	-0.426768	0.381432	1.000000		
FISINC_VC	-0.599422	0.250216	0.746359	1.000000	
REER	-0.545884	0.212708	0.256499	0.688657	1.000000

4.3.3 Normality Test of Residuals

One of the assumptions of linear regression analysis is that the residuals are normality distributed, at mean zero and standard deviation of one. If error terms are not normal, then the standard errors of OLS estimators won't be reliable, which means OLS estimator won't have the desirable BLUE (Best Linear Unbiased Estimator) property. This study applied Jarque-Bera test to detect normality problem in the model. Null hypothesis in Jarque-Bera test is that the data have been normally distributed. If we select 5% level of significance, then we may reject the null hypothesis Jarque-Bera test is below 5%; otherwise we have no option but to accept null hypothesis and conclude that the residual data are normally distributed (Brooks, 2008).

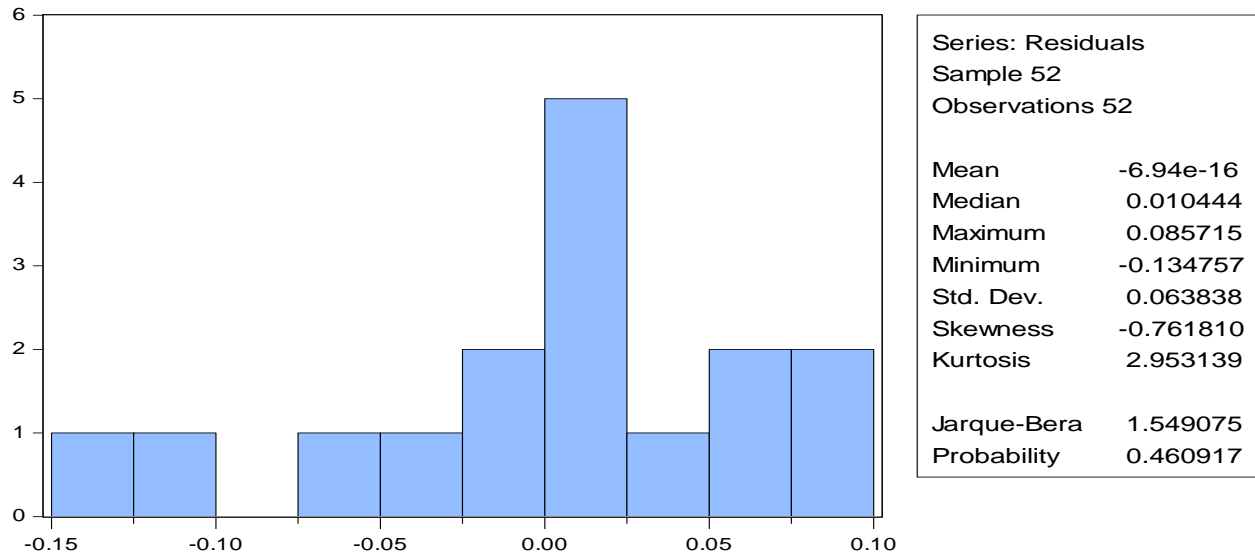


Fig 4.8 NORMALITY TEST OF THE RESIDUALS

As can be seen in the above graph Fig 4.8 and the associated table on the right side of the graph, the P-value of Jarque-Bera test is 0.460917 which is much higher than 5%. Therefore, we cannot reject the normality assumption. The histogram also shows that the residuals are normally distributed.

4.3.4 Autocorrelation Test

Autocorrelation test is conducted by applying Durbin-Watson Test (d-statistics) and Breusch-Godfrey Serial Correlation LM Test. The Durbin Watson statistics, d , fall between 0 and 4. If there is no autocorrelation, d is expected to be about 2. As a rule of thumb, if d is found to be 2 in an application we may assume that there is no autocorrelation. As per figure 4.12 the regression result of the model shows, Durbin Watson statistics value is 1.919937 which is near to 2. Therefore, it is concluded that there is no autocorrelation. In addition to Durbin Watson test the BG test (at 2 lags) which is shown in the below Figure 4-4 clearly presents the absence of autocorrelation hence the null hypothesis of there is no autocorrelation is not rejected as per the p-value of 0.6134 and 0.3985 for the F-statistic and Obs*R-squared respectively.

Fig.4.9 Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.519878	Prob. F(2,8)	0.6134
Obs*R-squared	1.840325	Prob. Chi-Square(2)	0.3985

4.3.5 Heteroscedasticity Test

Heteroscedasticity test aims at testing whether the regression model has constant residual variance for each observation. Heteroscedasticity is a systematic pattern in the errors where the variances of the errors are not constant. If the residual variance of each observation is different; we conclude that there is a heteroscedasticity. This study carries out White test for heteroscedasticity. The null hypothesis of this test is homoscedasticity or constant variance. At 5% level of significance, if the White p-value > 5%, it is possible to conclude that we have no heteroscedasticity problem. As per the below Figure 4-10, all of the three tests are greater than 5% hence we don't reject the null hypothesis of the constant variance of the residuals.

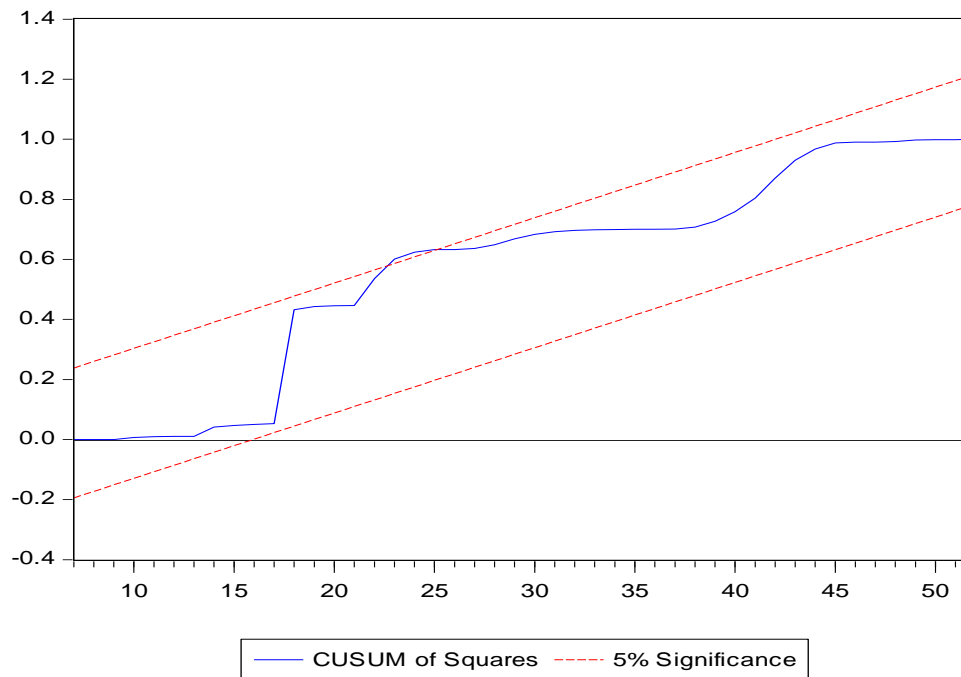
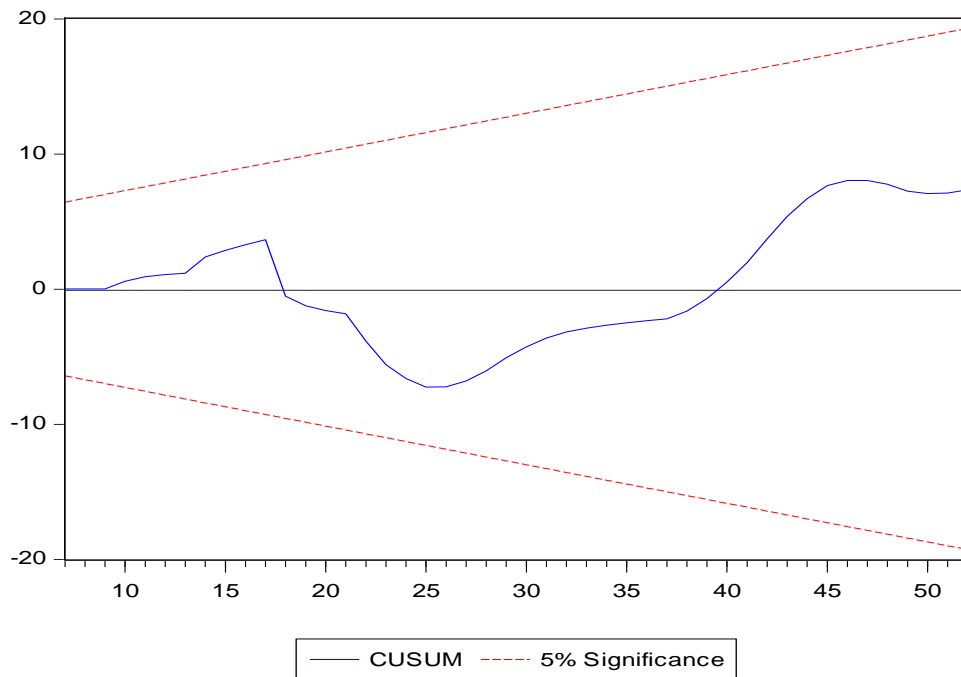
Fig. 4.10 Heteroskedasticity Test: White

F-statistic	0.985374	Prob. F(5,10)	0.4724
Obs*R-squared	5.281073	Prob. Chi-Square(5)	0.3825
Scaled explained SS	2.014584	Prob. Chi-Square(5)	0.8471

4.3.6 Model Stability Diagnostic Test

The stability of the model is detected by using the Cusum and the Cusum recursive residual test. The CUSUM test (Brown, Durbin, and Evans, 1975) is based on the cumulative sum of the recursive residuals. This option plots the cumulative sum together with the 5% critical lines. The test finds parameter instability if the cumulative sum goes outside the area between the two critical lines. According to the stability assumption if we find the blue line between/within the red line we accept the null hypothesis and reject alternative hypothesis on the contrary if blue lines cross red lines or outside the red line, we reject the null hypothesis and accept the Alternative hypothesis (which is not desirable).

Fig.4.11 testing parameters stability using Cusum and Cusum square of test



On the base of the following Fig.4.11 representation we conclude that the parameters are stable because the blue is existing within the red line, hence we will accept the null hypothesis of stable parameters.

4.4 Discussion of Time series Regression Results

Dependent Variable: EXPVAL

Method: Least Squares

Date: 06/17/19 Time: 00:04

Sample (adjusted): 52

Included observations: 52 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FININC_ECG	0.018012	0.008598	2.094940	0.0406
FISINC_DDB	-0.033476	0.021003	-1.593885	0.1165
FISINC_MBW	-0.009364	0.010630	-0.880917	0.3821
FISINC_VC	0.786153	0.057953	13.56528	0.0000
REER	0.116823	0.142467	0.114200	0.0000
C	5.688881	0.556198	10.22816	0.0000
R-squared	0.760223	Mean dependent var	10.44407	
Adjusted R-squared	0.747962	S.D. dependent var	0.391174	
S.E. of regression	0.152527	Akaike info criterion	-0.832561	
Sum squared resid	1.326071	Schwarz criterion	-0.628453	
Log likelihood	32.22567	Hannan-Quinn criter.	-0.752284	
F-statistic	70.15870	Durbin-Watson stat	1.919937	
Prob(F-statistic)	0.000000			

Fig.4.12 Regression results using Eviews 9

Estimation Command:

```
=====
LS EXPVAL FININC_ECG FISINC_DDB FISINC_MBW FISINC_VC REER C
```

Estimation Equation:

```
=====
EXPVAL = C (1)*FININC_ECG+C (2)*FISINC_DDB + C (3)*FISINC_MBW + C
(4)*FISINC_VC + C (5)*REER + C (6)
```

Substituted Coefficients:

$$\begin{aligned} \text{EXPVAL} &= 0.0180119259888 * \text{FININC_ECG} - 0.0334764359169 * \text{FISINC_DDB} - \\ & 0.00936385816428 * \text{FISINC_MBW} + 0.786152947721 * \text{FISINC_VC} + 0.116823 * \text{REER} + \\ & 5.68888050327 \end{aligned}$$

Fig.4.12 shows regressions estimation equation of Dependent variable (Export Growth) and independent variable fiscal incentives (Voucher Scheme, duty drawback, Bonded Warehouse), financial incentives(Export Credit guarantee) and Real exchange effective rate. According to the above figures The following Regression results are interpreted as follows:

4.4.1 Explanatory Power of the Model

The model is statistically fit with p-value of the F-statistic is 0.0000 and it is good enough to explain the model. The estimated results show R^2 and adjusted R^2 of 0.760223 and 0.747962 respectively. This signifies that 74.8% of the variations in export growth are explained by the independent variables.

4.4.2 Statistical test results for OLS Models

In this section by using E-views 9 econometrics software, we can find the result of t test by comparing probability of t value with level of significance. For our data, we are using 5 percent α or 95% confidence level. If the probability of t value < 5 percent, then we may conclude that the independent variable is significant toward dependent variable. To be more precise explanation of t-test for each independent variable will be presented below:

FININC_ECG

FININC_ECG show a positive sign and this indicates statistically significant relationship with Export value. The probability value of t-statistics for FININC_ECG rate is 0.0406, which is lower than 5 percent level of significance. The positive sign here is quite acceptable hence more financial incentives provided by the governments the number of exporters also increased and the result of this increase export growth. Assuming that other independent variables are constant, a 1unit change in FININC_ECG rate will result in a 1.8% change in Export growth.

FISINC_DDB

FISINC_DDB have a negative sign and statistically not significant with Export value. The probability value of t-statistics for FISINC_DDB rate is 0.1165, which is greater than 5 percent. Assuming that other independent variables are constant, a 1unit change in FISINC_DDB rate will result in a -3.3% change in Export growth.

FISINC_MBW

FISINC_MBW have a negative sign and statistically not significant with Export value. The probability value of t-statistics for FISINC_MBW rate is 0.3821, which is greater than 5 percent. Assuming that other independent variables are constant, a 1unit change in FISINC_MBW rate will result in a -0.01% change in Export growth.

FISINC_VC

FISINC_VC show a positive sign and this indicates statistically significant relationship with Export value. The probability value of t-statistics for FISINC_VCrates is 0.00000, which is lower than 5 percent level of significance. The positive sign shows exporters are freely entertain the voucher scheme because unlike duty drawback users, exporters who use the voucher scheme are not paid any duty and taxes for imported material which are used for export purpose. This implies that voucher scheme incentive provided by the government plays significant role for the growth of export. Assuming that other independent variables are constant, a 1unit change in FISINC_VC rate will result in a 78.6% change in Export growth.

REER

REER has a positive sign and statistically significant with Export value. The probability value of t-statistics for REER rate is 0.00000, which is lower than 5 percent level of significance. Assuming that other independent variables are constant, a 1unit change in Reer rate will result in an 11.7% change in Export growth.

4.4.3 Summary of Findings

Independent variables	Relationships	
	Hypothesized	Findings
FISINC_VC	+	+
FISINC_MBW	+	-
FISINC_DDB	+	-
FININC_ECG	+	+
REER	+	+

Chapter Five

Conclusions and Recommendations

This chapter deals with summary of major findings of the study and recommendations of possible solutions for the problems identified. Accordingly section one presents conclusion part, section two presents' policy recommendations and the last section presents recommendation for future research.

5.1 Conclusion

The main objective of this study was to empirically conclude the impact of export trade incentive on export growth using quarterly data for the year 2003-2018. During the study period descriptive and time series techniques were applied to appraise the trends of Fiscal incentive and financial incentive, share of fiscal incentives users for total export, Export performance and asses effectiveness of export trade incentive on Export growth.

According to the time series regression model results during the study period the author find that Fiscal incentives in the form of voucher scheme , financial incentives in the form of export credit guarantee and Reerhave robust relationship with Export value and their P-value is statistical significant with less than 5 % . On the other hand according to the regression results fiscal incentive schemes of Duty drawback and manufacturing bonded warehouse have statistically not significant at 5% level.

On the other hand based on the descriptive statistics and trend analysis the findings suggest that according 4.1.1 during the study period fiscal incentive provided by the government increased annually and financial incentive declined year to year. Voucher scheme covers 85% of the total fiscal incentive scheme provided to exporters. This indicate that most exporters are choosing voucher scheme because voucher scheme exporters are not paid any duty and taxes for raw materials imported like duty drawback users. Fig 4.1.2 also shows that the trend of export by fiscal incentive users for total export is 6.34% during the study period. It is true that export incentive increased export growth however; the share of incentive users for the total export is not that much significant. According to fig.4.1.2 the decline of the share of fiscal incentive users to the total export is the fail of exporters not utilize the export incentive scheme properly due to

various reasons. Fig.4.1.3 also the trend analysis of Ethiopia earning income from export increased annually. This implies that the introduction of the incentives scheme plays a significant contribution for the increment of export. However, the export earning is highly dependent on few primary commodities mainly agriculture products like coffee, cereals, oil seeds, Khat. Our trend analysis fig.4.6 revealed that Ethiopia export br.556.86 billion birr during the study period and out of this agriculture products accounted 78% of the total export value and manufacturing, mining and other export products covers 7%, 13% and 2% respectively.

The study also shows that Ethiopia export destination areas increased during the study period. The bilateral trade agreement, AGOA, EBA and COMESA free trade creates a channels for exporters to get market access in the international market and also they will get the opportunity to introduce their products in the international market although from Fig.4.5 evidenced that the total export earning to GDP is only 8.8% in the year 2018, which is insignificant and we conclude that the role of export on economic growth in Ethiopia is very low.

Apart from the above findings using our time series analysis the statistics result showed that there is a positive and healthy relationship between fiscal incentives (voucher scheme) , financial incentives(Export guarantee),REER and export growth during the study period. On the contrary Duty drawback and manufacturing bonded warehouse has no relationship with Growth of export value.

In General, from our statistics results we concluded that fiscal incentives in the form of Voucher scheme, financial incentives (export credit Guarantee)and Reerhelped the country to expand the export during the study period however our trend analysis evidenced that the country's export earning still highly dependency of few primary products.

5.2 Policy Recommendation

The main objective of export incentive schemes is to encourage exporters thereby increase the volume of export at the international market to increased foreign currency earning and employment opportunities for the country. Therefore, based on the evaluation and analysis of the paper, the following suggestions and recommendation are given.

- The implementation of the export incentives should be revised and take measure actions against the time consuming and backward method of export incentive controlling mechanisms which push aside exporters from using the incentives offered by the government. Specifically, duty draw back scheme should be very effective which allows exporters get a refund of the tax and duty they pay on the inputs they use on export production but unless they get the tax drawback on the time they need, it becomes obstacle instead of incentive. Duty drawback schemes have been very effective in most of the developing countries by putting clear assessment mechanism, and also fixing all industry rates mechanisms (duty drawback rate are decided in advance on the basis of information and are available for application for general use).Therefore, the government of Ethiopia has to develop such fixed rate together with a simple, easy and clear duty draw back assessment method by considering other countries experience.
- Export credit guarantee scheme has a huge potential to encourage exporters. Since the country's export performance is highly dependency of agricultural products, government should encourage for utilization of export ECG to generate foreign currency in the one hand and remove the treat of agricultural exporters who lost their hope because of seasonality and international market price.
- The overvaluation of the exchange rate of the Birr is also another factor discouraging exporters. Hence, government needs to establish a competitive exchange rate market or progressively and gradually devalue the Birr. If this not possible due to other macro considerations the government has to compensate exporters by paying certain amount of Birr per one dollar export earnings.
- The government should formulate policy to foster and encourage the manufacturing sector by providing additional and selective incentive schemes for exporters producing for domestic market. Such kinds of policy instruments are crucial to create excess capacity (use scale economies) at home and sell commodities at cheaper prices to the rest of the world.

- The incentives should be on merit based, currently the incentives are given to all exporters which fulfill the preconditions stated on the proclamation, however the incentives might be more effective if they can be given on selective bases of exporter's performance, sector involvement, foreign exchange earnings, forgone tax to foreign exchange earnings ratio etc.
- Lack of monitoring and coordination problems by government agencies in administer the export incentive leading to abuse of the incentives and open a door for exporters to use the incentive scheme for unintended purpose and pave the way of corruption practices. Therefore to avoid this problem Government must hire highly qualified professions who have good knowledge for the incentive scheme and have industry experience especially for the manufacturing sector. In addition to this government should build the capacity of incentive scheme administrator skills by providing continuous training and development.
- Proper maintenance of records about the incentive user is essential for various purposes, including review of policy measures. Therefore, the system must be networked in all government incentive scheme administrative institution in order to provide accurate and timely information.
- Government should capitalize exporter's awareness for the incentive scheme by facilitating discussion platforms together with the concerned institution like Chamber of commerce, Ethiopian investment commission.

5.3 Recommendation for future research

This study could not cover the entire incentive scheme provided by the Ethiopian government to exporters. Therefore, the researcher highly recommended future researches for the impact of all incentive schemes on export growth in terms of scope and degree of impact.

References

Bela Balassa, Evangelos Voloudakis and Suk Tai Suh. (1986); "Export Incentive and Export Growth in Developing countries: an Econometric Investigation": Discussion paper Report No. DRD159.

Damodar N. Gujarati (2003). *Basic econometrics 4th Edition*. New York: McGraw-Hill.

E-Views statistical software user's Guide II version 8.1 and version 9.1

Fanta and Teshale. (2013), "Export Trade Incentives and Export growth Nexus: Evidence from Ethiopia"; British journal of economics, *Management and trade working paper* :111-128.

Federal Negarit Gazeta (2001), "Export Trade Duty Incentive Schemes" Establishing Proclamation No. 249/2001: Addis Ababa, Ethiopia.

Fiscal incentives in Nigeria (2013), Lessons of experience: Occasional Paper No. 47.

Gusti Ngurah Agung. (2013), How to use Time series Analysis Data using E-Views?

Hassan, Seid. (2001), "Exports, Trade Liberalization and Economic Growth in Sub-Saharan Africa"; International Conference on African Development Archives: Paper 21.

Halit Yanikkaya, Hasan Karaboga. (2017), "The Effectiveness of investment incentives in the Turkish Manufacturing Industry"; Prague Economic Papers.

Imtiaz Ahmad (2015), "The Value of Export Incentives"; the Lahore Journal of Economics 20:2: pp. 99–127.

Joshua Morris Hurwitz. (2015), "Incentives for the Twenty-first century": International Economic development council.

J. International Business and Entrepreneurship Development (2009), “Export incentives and international entrepreneurship in New Zealand firms”; Vol. 4, Nos. 1/2.

John Onyonka B Akara(1989),“the Impact of trade incentives on exports, balance of payment and economic growth in Kenya”:an empirical Analysis.

Kenneth P. Thomas, University of Missouri-St. Louis (2007),“Investment incentives growing use, uncertain benefits, and uneven controls”: An exploration of government measures to attract investment.

Krista Tuomi(2012, June), “Review of Investment incentives”: Best Practice in attracting investment.

Kwan S. Kim (1991, November),“the Korean Miracle (1962-1980) Revisited: Myths and Realities in Strategy and Development”, Working Paper #166.

Lise Johnson and Perrine Toledano, (2013),“Investment Incentives: The good, the bad and the ugly Assessing the costs, benefits and options for policy reform”;Background Paper for the Eighth Columbia International Investment Conference.

MuluGebereyesus (2017),“why export promotion efforts failed to deliver? Assessment of the export incentives and their implementation in Ethiopia”; Ethiopian Research Development Institute: ERDI working paper 17.

Nigeria N.M. GATAWA, Yusuf U. DANTAMA & Mohammed B. SANI, (2017): “Impact of export incentive schemes on the performance of agricultural exports”; in and volume 4, issue Number 4.

OlabanjiOlukayodeEwetanW(2013), Econometric Analysis of Exports and Economic growth in Nigeria.

Sebastian James (2009), “Effectiveness of Investment Incentives in developing countries Evidence and Policy Implications”; The World Bank Group.

Sebastian James (2013), “Tax and None tax incentives and investments: Evidence and policy implications”.

Shahram Gillani.(2013), “Export Incentives and its importance in the export performance”; Arabian journals of business and Management review :(Nigerian chapter) Vol.1, No.11.

T. Ademola Oyejide(2007), African Trade, Investment and Exchange Rate Regimes and incentives for exporting.

Tax Justice Network-Africa and Action Aid International (2012) “Tax competition in East Africa a race to the bottom?”, Tax incentives and revenue losses :Tanzania.

UNCTAD (2004), “UNCTAD/ITE/IIT/2003/5 Incentives: UNCTAD series on issue in International investment agreement”, United Nation: New York and Geneva.