



SEEK WISDOM, ELEVATE YOUR INTELLECT AND SERVE HUMANITY!

Addis Ababa University
አዲስ አበባ ዩኒቨርሲቲ



ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
SCHOOL OF GRADUATE STUDIES

**THE EFFECTS OF EXPORT INCENTIVE SCHEMES ON
NATIONAL EXPORT EARNINGS OF ETHIOPIA**

Meleket Sahlu Denbu

ADDIS ABABA, ETHIOPIA

JUNE, 2021

ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE

**THE EFFECTS OF EXPORT INCENTIVE SCHEMES ON
NATIONAL EXPORT EARNINGS OF ETHIOPIA**

**A Thesis Submitted in partial fulfillment of the requirements for
the Degree of Master of Science in Development Economics**

Meleket Sahlu Denbu

Advisor: - Aregawi Gebremedhin (PhD)

ADDIS ABABA, ETHIOPIA

JUNE, 2021

Statement of Declaration

I, Meleket Sahlu Dennbu, hereby declare that this Master thesis “The Effects of Export Incentive Schemes on National Export Earnings of Ethiopia” is my original work. I have conducted the study independently with the support and guidance of my Advisor Aregawi Gebremedhin (PhD). Any academic or other resources used in this research have been properly cited.

I further confirm that this research has not been submitted for the purpose of receiving a degree or diploma from this or any other university.

Meleket Sahlu

Name of the Author

Signature

Date

Statement of Certificate

This is to certify that this master's thesis titled "The Effects of Export Incentive Schemes on National Export Earnings of Ethiopia" submitted by Meleket Sahlu is her own original work, which she has submitted for examination with my approval as the university advisor.

Aregawi Gebremedhin (PhD)

Name of the Author

Signature

Date

Addis Ababa University
School of Graduate Studies

This is to certify that the thesis conducted by Meleket Sahlu, titled “The Effects of Export Incentive Schemes on National Export Earnings of Ethiopia” and submitted in partial fulfillment of the requirements for the degree of Master of Science in Development Economics complies with the University's regulations and satisfies the acceptable requirements for originality and quality.

APPROVED BY BOARD OF EXAMINERS

External examiner: _____ Signature _____ Date _____

Internal examiner: _____ Signature _____ Date _____

Advisor: _____ Signature _____ Date _____

ACKNOWLEDGEMENTS

First of all, I would like to extend my deepest gratitude to God for his unstopping support throughout my thesis and course works. Second, I would like to give special thanks to my advisor professor Aregawi Gebremedhin (PhD) for his assistant and kind suggestions. The technical inputs and support of Melat Tekaligne, Yared Seied and Nati Tesfu are much appreciated as their advice helped to deliver concrete recommendations.

The assistance of Abel Birhane Meskel is highly valued as his involvement eased the most tedious phases of the study. His inputs also helped to upgrade the conceptual framework of the study. The support of Herani Sahlu and Assay Sahlu is greatly commended as their contributions and feedbacks assisted to improve the quality of the work undertaken.

Finally, I would like to extend my sincere appreciation to all the institutions that spared their valuable time to provide the data required for the study. Their contribution made it possible to materialize the research.

ACRONYMS

ADF	Augmented Dickey-Fuller
ADRL	Autoregressive Lag Model
CBEs	Commercial Banks of Ethiopia
DBE	Development Bank of Ethiopia
ECC	Ethiopian Custom Commission
EIC	Ethiopian Investment Commission
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
IMF	International Monetary Fund
MoF	Ministry of Finance
MoTI	Ministry of Trade and Industry
NBE	National Bank of Ethiopia
UNCTAD	United Nations conference on Trade and Development
VAR	Vector Autoregressive Model
WBG	World Bank Group

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
ACRONYMS	iii
TABLE OF CONTENTS	4
ABSTRACT	15
CHAPTER ONE: INTRODUCTION	16
1.1 Background of the Study	16
1.2 Statement of the Problem.....	17
1.3 Research Objectives.....	18
1.4.1 <i>General Objective</i>	18
1.4.2 <i>Specific Objectives</i>	18
1.4 Research Question	18
1.5 Hypothesis of the Study	19
1.6 Significance of the Study	19
1.7 Scope of the Study	19
1.8 Limitation of the Study	20
1.9 Organization of the Thesis	20
CHAPTER TWO: LITERATURE REVIEW	21
2.1 Definition of Terms.....	21
2.2 Theoretical Reviews.....	22
2.2.1 <i>Theory of Trade and Export Incentives</i>	22
2.3 Empirical Reviews	26
2.3.1 <i>Reviews on Ethiopia's Export Incentives Schemes</i>	28
2.4 <i>Export incentives in Ethiopia (Policies and Regulations)</i>	31
2.5 <i>Countries Experience</i>	37
2.6 The Research Gap.....	45
2.3 Conceptual Framework.....	45
CHAPTER THREE: RESEARCH METHODOLOGY	46
3.1 Research Approach	46
3.2 Research Design.....	46
3.3 Method of Data Analysis	46
3.4 Model specification and Estimation procedure.....	47
3.5 Data Type and Sources	49
3.6 Ethical Consideration.....	51
CHAPTER FOUR: RESULT AND DISCUSSION	52
4.1 Descriptive Statistics Results.....	52
4.1.1 <i>Export</i>	52
4.1.2 <i>Fiscal and Financial Incentive</i>	53
4.1.3 <i>Export and Fiscal Incentives</i>	54
4.1.4 <i>Export and Financial Incentives</i>	54
4.1.5 <i>Real GDP</i>	55
4.1.7 <i>Inflation</i>	55
4.1.8 <i>Foreign Direct Investment</i>	56
4.2 Descriptive Analysis of the data	57
4.3 Econometric Analysis	58
4.3.1 <i>Unit root test based on Augmented Dickey-Fuller (ADF) test</i>	58
4.3.2 <i>Optimal Lag Selection</i>	59
4.3.3 <i>ADRL Bound-Cointegration Test</i>	59
4.3.4 <i>Long run estimation result (VECM model)</i>	60
4.3.5 <i>Short run ADRL model</i>	63

4.3.6 <i>Pairwise Granger Causality Tests</i>	63
4.3.7 <i>Normality Test</i>	64
4.3.8 <i>Heteroskedasticity tests</i>	65
4.3.9 <i>Autocorrelation Test</i>	66
4.3.10 <i>Multicollinearity test</i>	67
CHAPTER FIVE: CONCLUSION AND RECOMMENDATION	68
6.1 Conclusion	68
6.2 Recommendation	69
Reference	70

List of Tables

Table 1: Interest rates charged by banks on different type of loans	35
Table 2: Variable description and Data Sources	50
Table 3: Descriptive Statistics	57
Table 4: Augmented Dickey-Fuller (ADF) test	58
Table 5: Optimal Lag Selection	59
Table 6: Bound-Cointegration Test	59
Table 7: Long-run VECM model.....	62
Table 8: Short run ADRL model	63
Table 9: Pairwise Granger Causality Test	64
Table 10:The Heteroskedasticity test of the multiple regressions	66
Table 11: Autocorrelation Test	66
Table 12: Multicollinearity test.....	67

List of figures

Figure 1 Conceptual Framework	45
Figure 2: Trend of Export Volume	52
Figure 3: Export to GDP Ratio	53
Figure 4: Trend of Fiscal and Financial Incentives	53
Figure 5: Trends in Export and Fiscal Incentives	54
Figure 6: Trends in Export and Financial Incentives	54
Figure 7: Trend of Real GDP	55
Figure 8: Trend of Inflation	56
Figure 9:Trend of FDI.....	56
Figure 10: Trends in Export and FDI.....	57
Figure 11: Normality Test.....	65

ABSTRACT

In the past twenty-plus years, Ethiopia has been striving to promote the development of the export sector. The country has introduced various incentive schemes to encourage investors who are engaged in export activities. Nevertheless, the country's export performance remains low when compared to Sub-Saharan African countries, having one of the least Export to GDP ratios. This study analyzed the effects of fiscal and financial export incentive schemes on the nation export performance of Ethiopia by using annual time series data from 1995 to 2020. The study adopted the Autoregressive Distributed Lag model to investigate the short-run and long-run relationship between custom duty exemption and export credit on export performance. In addition, a qualitative approach, interview with high-level experts, was carried out to have an in-depth understanding of the quantitative findings. The bound test of the study revealed that there is a long-run relationship between export credit and export volume. Keeping other things constant, a 1% increase in export credit results in a 0.63% increase in export volume. This result can indicate that export credits have positive effects on export performance both in the short and long run. On the other hand, while fiscal incentive (custom duty exemption) has a significant and positive relationship with export volume in the short run, in the long run, it becomes statistically insignificant. The absence of a long-run relationship between custom duty exemption and export performance might imply incentives provided in the form of customs duty exemption are more assisting the first years of the business. The error correction term estimated in the research using the ADRL model was found to be negative and significant as predicted. Based on the findings of the study suggested the introduction of additional financial initiatives to improve credit, interest rate policies. On the other hand, it recommended reform measures such as revising the national input-output coefficient system and streamlining the outdated accounting systems to improve the long-term impact of custom duty exemptions.

Keywords: *Export incentives, Export Volume, Fiscal Incentives, Financial Incentives, Custom Duty Exemption, Export Credit*

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

International trade has been playing a paramount role in the economic development of many countries around the world. Particularly, export-led growth strategy continues to be a major policy agenda of many developing countries that are striving to break out of the poverty trap (Santos-Paulino, 2017). Such sentiments of export are mostly derived from the success of the East Asian countries who largely witnessed tremendous economic performance following an aggressive policy shift towards the export sector (Blancheton & Chorn, 2019).

In the second half of the 20th century, while many LDCs were focusing on import substitution strategies, the countries that are commonly known as “Asian tigers” gave great emphasis to the growth of their export sector (Medina-Smith, 2001). Strong determination and political commitment were shown by these countries towards implementing export promotion strategies along with putting in place the right incentive mechanisms and institutional structures. The dedication showed towards advancing the export sector enabled the countries to witness miracles of economic growth in a short period (Palley, 2011).

Like many developing countries, Ethiopia has been striving to implement various policy measures that aim to fast-track the integration of the economy to global trade. For more than two decades, the country has adopted an export-centric national industrial development strategy (Oqubay, 2018). Moreover, various fiscal, financial, and institutional incentive schemes have been introduced by the government to promote priority export-oriented sectors (Teshale and Fanta, 2014).

Since the beginning on 1990s, Ethiopia's government has introduced and implemented new trade export incentive schemes (Duty Drawback, a Voucher System, and Bonded Manufacturing Warehouses etc....) to promote exporters, accelerate the country's industrial growth, improve foreign exchange earnings, transform the country's industry-led economy, and create a favorable environment for domestic products to compete in the global market. The adoption of such incentive schemes had somehow supported exporters in the country to access and expand in world market (Gebreyesus and Demile, 2017).

Despite the establishment of export trade incentive schemes in Ethiopia, the country's export performance remains low, indicating that exports as a percentage of GDP are very low when

compared to other Sub-Saharan African countries. The impact of export trade incentives on the growth of the country's goods and service exports is still doubtful at a national level. Empirical evidences that examine the effects of export incentive on the growth of the export sector. This paper examined the effects of fiscal and financial incentives provided by the Ethiopian government to increase export earnings. While various incentives are put in place across sectors, the study analyzed the effects of custom duty exemptions and export credits on the total volume of export.

1.2 Statement of the Problem

Over the years, export performance in Ethiopia has not changed in terms of value, volume, and diversification. According to various sources, Ethiopia's export revenue has not exceeded \$ 3 billion in the country's history (NBE, 2020; MoTI, 2019). In a wider sense, various reasons can be stated as to why the export sector has not grown as much as it should. The major reasons being shortage of supply (low productivity), lack of competitiveness in quality and price, weak coordination between service provider institutions set up to support export, shortage of infrastructure, and insufficient as well as the improper implementation of incentives instruments (Ahmad, 2015). Getting economic incentive mechanisms right contributes substantially to improve productivity, competitiveness, and quality challenges faced across sectors in the economy (UNCTAD, 2004).

Incentives are fundamental insights into the theory of economics that defines the intrinsic human desire to grasp opportunities for improved economic gain (Shahram,G et al.,2013). Policymakers provide various incentive instruments that rely on market forces, aspiring to correct consumers, and producer behaviors. Nevertheless, such incentives must be scrupulously scrutinized as the support provided in one sector is an opportunity cost to another sector (UNCTAD, 2004). For instance, when the government is providing tax incentives either in the form of a business income tax holiday or custom duty exemption to exporters, the government is incurring cost- through tax revenue foregone (a resource that could have been allocated elsewhere). Hence, the government must critically analyze the role of incentives in stimulating productivity and in correcting market prices. Otherwise, incentives at times may have adverse effects either in the form of distortion or by consuming government expenditure.

Aspiring to increase earnings from export and the sector's share of the economy, the Ethiopian government has been providing incentives to encourage producers and exporters across sectors.

Conducting rigorous analysis on continues bases is required to ensure that such incentives are serving proposes they intend to serve. Studies have shown that economies that closely and dynamically manage incentives are more successful towards realizing export-oriented growth (Belloc, M et al., 2012). In countries where incentive schemes lack proper scrutiny, they are prone to abuse and exploitation, resulting in government revenue loss and distortions (Archiv, 2017). Within this context, this paper made a contribution as it systematically analyzed the effects of custom duty exemptions and export credits on national export earnings. While doing so, the study attempted to fill the gaps uncovered by others researches.

Various studies have been conducted in Ethiopia to analyze the relationship between export incentives and export growth. While some of the studies advocated the need to further promote export incentive shames (Gebreyesus and Demile, 2017; Getachew, 2019; Hailu, 2015; Fanta and Teshale, 2014; Ahmed and Adinew, 2019; Gemed, 2020)), others argue that the effectiveness of the incentive schemes needs to be carefully monitored before upgrading and expanding the packages (Wolde 2019).

The above researches made a decent contribution to the understanding of incentives and their association with export performance. On a similar direction, this study wishes to future expand and contribute to the argument on export incentives. The study analyzed the short run and long-run interaction between export incentives and export growth by using ARDL (Autoregressive Distributed lag model).

1.3 Research Objectives

1.4.1 General Objective

The General objective of the study is to examine the effects of fiscal and financial incentives in improving the export performance of Ethiopia.

1.4.2 Specific Objectives

- ✓ To identify the effects of custom duty exemptions on supporting export performance,
- ✓ To examine the effects of export credits in the growth of export earnings.

1.4 Research Question

The study aims to investigate the effects of fiscal and financial incentives on the growth of export earnings.

- ✓ To what extent is custom duty exemptions contributing to the growth export earnings?
- ✓ To what level are export credits supporting the growth of export earnings?

1.5 Hypothesis of the Study

This study wishes analyze the long run and short association between export incentives and export growth by adopting the Autoregressive Distributed Lag (ARDL). Based on the result from the bound test result, if the variables understudied are cointegrated it will specify both short-run ADRL and long-run VECM models. In scenario where the variables are not cointegrated, only the short-run (ADRL) model is specified. ARDL model contains the lagged value(s) of the dependent variable, the current and lagged values of regressors (explanatory variables). Hence while carrying out the bound test the study used the following hypothesis.

Hypotheses:

$$H_0: b_{1i}=b_{2i}=b_{3i}=0 \quad (\text{where } i=1,2,3)$$

$$H_1: b_{1i} \neq b_{2i} \neq b_{3i} \neq 0$$

H₀, the null hypothesis indicates that the coefficients of the long run equation are all equal to zero and by that implying there is no cointegration among variables.

H₁, the alternative hypothesis indicates that the coefficients are different from zero, indicating long term association among variables.

1.6 Significance of the Study

The findings from this study provided informative findings that can assist policymakers on the initiatives that must be taken to improve the fiscal and financial incentives provided to boost national export performance. The study provoked a discussion on to what extent the government expenditures, expressed in the form of incentives in the study, offer value for money; meaning whether such resources could be better allocated elsewhere. The study has also added new knowledge to the existing literature for researchers interested in the topic under studied.

1.7 Scope of the Study

In the course of examining the effects of export incentives on the growth of export performance, the study focused on trends and patters of export volume. The study considered twenty-six years (from 1995 to 2020) data to analyze the trends of export against incentives provided to firms operating in exporting activities. The study selected the year 1995 as it is the

starting period where proclamation and regulation relating to fiscal and financial incentives started being implemented effectively, after the EPRDF took-over the regime.

1.8 Limitation of the Study

The study desired to undertake a comprehensive investigation on all types of export incentives (financial, fiscal, and institutional). However, it faced challenges in terms of identifying proxies that are well fit to measure institutional incentives. Hence, the study was only able to examine financial and fiscal incentives. In addition, among fiscal incentives, initially, the study wished to address both income tax holiday and custom duty exemption. Data concerning tax holidays are not readily available, making it difficult to estimate the amount of tax revenue forgone; as a result, the study used custom duty exemption as an indicator for measuring fiscal incentives. In the same manner, ideally, it was planned to use priority in getting access to foreign currency and export credit as proxies to examine the effect of financial incentives. Nevertheless, the study was not able to access the amount of FX availed to exporters (as NBE doesn't keep such records), export credit is used as a proxy.

1.9 Organization of the Thesis

This paper is organized into five chapters. This chapter, introductory section, demonstrates statement of the problem, objectives, purposes, scope, and significance of the study. Chapter two presents theoretical and empirical reviews. The theoretical review section describes underlying theories and operational definitions. The empirical review section summarized the findings of previous researches similar to the topic probed by the study. In addition to theoretical and empirical reviews, the study presented a thorough review of current policies and directives adopted by the Ethiopian Government along with the experience of selected developing and neighboring countries. Chapter three elaborates the methodological framework of the study including, model specification, estimation techniques, and method of analysis. Chapter four demonstrates the findings of both descriptive and econometric analysis. Finally, chapter five presents the conclusion and recommendations drawn out by the study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Definition of Terms

Goods Export: Exports refer to the value of goods produced by a country's firms in a given period of time and which are sold abroad (Tran, 2020). Export has significant contribution to the growth of national gross output, employment, reducing inflation, generating foreign exchange and stabilizing investment flow (Hong, 2019).

Incentives: Incentives are instruments used by countries to pursue development strategies. They are introduced by the government to compensate deficiencies in the business environment. In addition, they can assist to correct market failure arising from externalities of production or missing markets. Meanwhile, incentives can potentially result in distortions and diversion of financial resource that could otherwise be more effectively used for other development purposes (UNCTAD, 2004). According to (Dekker, L et al., 2020), incentives are fundamental insight in the theory of economics, defining the intrinsic human desire to grasp opportunities for improved economic gain.

Fiscal incentives: includes instrument such as tax holidays, reduced taxes and custom duty exemptions (UNCTAD, 2004). Financial incentives in-relation-to export refers to those instruments taken to reduce disincentives to export relating to duties on import needed for production of export goods, as well as duties on production that add unnecessary cost to the selling price of export products (Hibbert, 1990).

Financial Incentives: includes instruments such as loans at concessionary rates, outright grants and special foreign exchange allocation (UNCTAD, 2004). Financial incentives concerning export refers to those measures designed to make export business attractive through compensation for price disadvantage resulting from internal regulations that are not oriented towards export promotion (Hibbert, 1990).

Institutional Incentives: such instruments refer to those institutional setups established to support the performance of export sector. For instance, the Ethiopian government established industrial parks in different regions of the country by connecting exporters with input suppliers, providing infrastructure, and providing various services such as customs, finance, and quality assurance via one stop shop centers. Besides, Development Bank of Ethiopia is providing

concessionary interest rates for exporters and manufacturers engaged in export trade (PSI, 2019).

2.2 Theoretical Reviews

2.2.1 Theory of Trade and Export Incentives

The theory of international trade goes back to the theory of mercantilism from 1500-1800 ad. The theory fundamentally defines wealth as the accumulation of gold. A surplus in gold was considered as a basis for national power to pay for the armies, build national institutions, and many other state related activities. Hence, by all means a country was encouraged to export more than it imported to amass surplus in gold. In order to produce favorable balance of trade countries restricted imports and provided subsidies that promote export (Herlitz, 2011).

Nevertheless, as the amount of gold in circulation was fixed in the short run, not all nations could benefit from such inflows at the same time, and trade advantages could be enjoyed only at the expense of others. The prominent Scottish philosopher, Adam Smith, known as "The Father of Economics" challenged the mercantilist view introducing the concept of free trade on the bases of absolute advantage theory. He demonstrated that the benefits of international division of labor and specialization would be shared by all nations that would gain from open international trade at the same time. As a result, when countries specialize in areas where they have absolute factor advantages, trade benefits all nations rather than just a few, and there is no need for government intervention that simply worsens resource allocation and productivity (Collins, 2017). Unlike mercantilist, Smith measured the wealth of nation based on the availability of goods and services rather than gold.

Adam Smith made a significant contribution to the theory of international trade with his introduction of absolute advantage. However, his theory overlooked the scenario whereby a country has absolute advantages in the producing of all things (Charles, 2000). David Ricardo, who created the theory of comparative advantages to demonstrate that mutually beneficial commerce could continue even when one nation was absolutely more efficient in the production of all things, overcame Smith's weaknesses. This is one of the most important assumptions of economic theory and practice that has yet to be disputed. David Ricardo's views were based on the labor theory of value, which emphasizes the importance of labor in the formation of value. Ricardo ignored the impact of natural resource endowments on productivity

and international specialization, as well as the impact of trade on income inequality (Formaini, 2008).

Two Swedish economists, Eli Heckscher and Bertil Ohlin, created a factor endowment model in the 1930s to better understand the theory of international trade. They claimed that international trade is founded up on nations differences in factor of endowments. Nations have comparative advantages in different industries due to varying endowments of factors of production, and their relative price levels differ (Baldwin, 2008). A country relatively will export goods that are intensive in its relatively abundant factor and will import goods that are intensive in its relatively scarce factor.

International trade, according to Ricardo and other classical economists, is based on differences in comparative costs. It's worth noting that Heckscher and Ohlin agreed with this basic premise and merely went on to discuss the mechanisms that lead to difference in comparative commodity costs between different countries or regions. Disparities in comparative costs were explained by Ricardo and others who followed him as originating only from differences in efficiency and skill of labor (Uddin, 2021).

This is insufficient to account for difference in comparative costs. More major elements, according to Ohlin, are disparities in nation's factor endowments and differences in factor proportions of producing different commodities, which account for differences in comparative costs and, as a result, form the ultimate basis of inter-regional or international trade. As a result, the Heckscher-Ohlin theory complements rather than contradicting the comparative cost theory by providing a sufficiently good account of what causes variations in comparative costs (Leamer, 1995).

The Heckscher and Ohlin model is general referred as the modern theory of international trade as there is a general consensus among modern economist on the explanation they presented. Furthermore, since the theory is based on general equilibrium analysis of price determination, it is also known as General Equilibrium Theory of International Trade (Lloyd, 2001).

The Heckscher-Ohlin theory was challenged after WWII by the evolution of international trade, which it was unable to explain. Significant intra-industry trade flows based on product differentiation, exports of items intensive in countries where resources are scarce and

expensive (the so-called Leontief paradox), trade based on economies of scale, trade based on technical gaps, and product cycles are requiring a new explanation (Uddin, 2021).

Different theories have made an effort to address this issue. Raymond Vernon, for instance, established the international product life cycle theory to demonstrate trade based on technical gaps. According to the notion, all of the parts and labor connected with a product come from the place where it was invented early in its life cycle. Production gradually moves away from the point of origin after the product is adopted and used in global markets. In some cases, the product is end up becoming an item that is imported by the country of origin (Vernon, 1966).

As a result, the industrialized nations' comparative advantage in producing new products goes to lower-wage countries. Vernon made a significant contribution to the theory of business internationalization by putting together explanations of international trade and investment flows that followed trade. Later, in the international industry life cycle model, this hypothesis was extended to describe industry internationalization (Vernon, 1966).

Alexander (1952) introduced absorption theory emphasizing on the relevance of devaluation of currency. The absorption method to balance of payments asserts that a country's balance of trade will improve only if it's output of goods and services grows faster than its absorption, where absorption refers to domestic populations spending on goods and services.

Staffan B. Linder, a Swedish economist, attempted to use demand structure to explain the pattern of international trade. He first proposed this theory in 1961. A manufactured product, according to Linder, is often not exported until there is demand for it in the original country. In actuality, the products are mostly manufactured to fulfill domestic needs. In his theory of overlapping demand, Stefan Linder explained intra-industry trade by claiming that international commerce in manufactured goods will be larger between countries with comparable per capita income levels than between countries with different per capita income levels (Caglayan-Akay & Oskonbaeva, 2018).

Michael Porter, who created the notion of nation-state competitive advantages, provided a cogent explanation of modern international trade. He claims that the Porter Diamond encapsulates four criteria that impact competitiveness and thus international trade. Factor conditions, demand conditions, firm structure and rivalry, and finally, the strength and existence of related firms and supporting industries are all factors to consider. As a result,

industry clusters emerge, which establish and strengthen local firm competitiveness. Porter's theory makes a significant advance by linking national competitive advantages to the firm decision-making (Stonehouse & Snowdon, 2007).

James Brander and Barbara Spencer in the early 1980s caused quite a sensation with their analysis of trade policy under imperfect competition. The Brander-Spencer analysis accomplished three objectives. First, it provided a particularly ingenious manner of framing the case for activist trade policy, one that greatly simplify the issue while revealing its essence. Second, it appeared to imply that the new trade theory supported at least a restricted version of neo-mercantilism, the idea that governments may boost national income at the expense of other countries by supporting national firms competing in foreign markets. Third, and not insignificantly, the Brander Spencer strategy could be summed up with a term that, although true, looked to offer a larger prize than Brander and Spencer ever suggested: "strategic trade policy" (Brander & Spencer, 1984).

Alan Rugman's approach in the 1990s extended Porter's "single" diamond concept to explain the evidence for further globalization provided by recent surveys, which found that the more global a firm was, the more competitive benefits it derived from its overseas affiliates. This theory represents the preponderance of trade-related investment and investment-related trade flows, and it is a successful attempt to bring together the perspectives explaining current global trade and investment growth (Rugman & Verbeke, 2005).

Rugman claims that the world's structural interconnectedness is deepening. Rugman claims that the international economy's rising structural integration and the rise of alliance capitalism are expanding the geographical scope for developing or augmenting firm-specific abilities and learning experiences. Any attempt to pinpoint the geographic sources of such advantages must take into account the diamonds of other countries, particularly those with which home-country companies have the most trade, FDI, and non-equity co-operative partnerships (Rugman & Verbeke, 2005).

Balassa, inspired by the East Asian expanding export strategy, introduced four main principles regarding outward-oriented development strategy in the second half of the 20th century. The first is that, where warranted for infant-industry consideration, preferential treatment of manufacturing operations should be implemented on a moderate scale. Second, in the manufacturing sector, exports and import substitutes should be treated equally. Third, within

manufacturing, variance in incentive rates should be kept to a minimum. Fourth, to reduce uncertainty, the incentive system should be stable and automatic (Balassa, 1990).

2.3 Empirical Reviews

Various empirical works are presented by scholars concerning the impact of export incentive on improving the performance of the export sector. Yin and Yin (2005) analyzed the effect of export subsidies and incentives on raising imports of capital goods and on reducing distortions induced by foreign exchange constraints by constructing a general equilibrium model. The study found that promotion policies can undoubtedly increase employment and productivity, but whether these measures can stimulate the production supplying to the domestic market and improve domestic welfare depends on number of factors.

Murage (2008) examined the effects of tax incentives on a firm's decisions to invest in export processing zones in Kenya. The study adopted the Pearson's Product Moment Correlation Coefficient. The study analyzed the data of 104 firms in the export processing zone. The study confirmed the increase in sales and profit following investment in firms. Nevertheless, the influence of tax incentives on the decision to invest in export processing zone was found to be insignificant. The author suggested the government consider incentives other than tax to enhance the firms' sales and profit.

A study that empirically investigated twenty export incentives provided to New Zealand entrepreneurs identified that 13 of the incentives were found to be significant while the rest 7 were not significant (Dana, 2009). The author suggested New Zealand policy makers to concentrate those incentives that managed to motivates non-exporters to engage in export sector. He future alluded that being aware of effective incentives will assist to reduce minimized the amount of forgone government revenue.

Ahmad (2015) developed comparative analysis of industry-specific export incentives. Particularly, he analyzed the various export incentives provided to the textile sector in Bangladesh, India and Pakistan using industry-level data starting from 2001 to 2011. The findings of his study revealed that Bangladesh is a highly export-oriented regime among the three countries, having a highest value of export incentives. The study suggested that Pakistan needs to further improve export incentive schemes, particularly for value-added textiles.

Larbi and Chymes (2015) evaluated the impact of government policy and incentives on the export activities of Agri exporters in Tunisia, particularly focusing on the olive oil sub-sector. The study adopted an analysis of co-integration as underlying abstract frame to test the relationship between the dependent variable and the independent variables. The findings from the study highlighted that export incentives should be oriented towards increasing national production and quality of olive oil production.

Ahmad, S, et al. (2017) examined the effects of government export incentives on Malaysian Small and Medium-sized enterprise export activities. The study analyzed the response of 300 enterprises and concluded that export activities are considerably affected by export incentives such as tax exemptions on increased export earnings, sales tax exemptions, industrial building allowance and, export financing activities.

Basarir & Sarihan, (2018) analyzed the effects export credits availed by banks and investment incentives on Turkey's export performance were investigated using ADRL model. The study used a time series data from the year 2002 to 2016. The boundary test results, according to ARDL, indicate that there is a co-integration relationship between variables. A 1% increase in export credits results in an approximate 0.82 percent increase in exports.

In the same manner, Gatawa, N, et.al (2020) examined the link between export incentive schemes and the performance of manufacturing export in Nigeria's by using time series data from 1990 to 2014. The study adopted the Autoregressive Distributed Lag (ARDL) model to cointegration analysis and granger causality test to explore the long-run and causality relationship between export incentive schemes and growth in export output of manufacturing sector. According to the bound test of the study, there is no long run equilibrium relationship among the performance of manufactured export output (MNF) and Export Incentive Schemes in Nigeria. The study highlighted that the granger casualty tests show the existence of a unidirectional relationship between Manufactured Export (LMNF) and Export Expansion Grant (LEEG). Based on the findings of the study the author recommended that the EEG scheme must be further improved to enhance the performance of manufactured export in Nigeria.

2.3.1 Reviews on Ethiopia's Export Incentives Schemes

During the imperial and military regime Ethiopia adopted an inward-looking development policies and strategies. Major features of the policies are high tariff rates, over valuation of birr for lengthy period of time, tight foreign currency control, heavy taxation on export and various non-tariff barriers. Such policy measures either directly or indirectly impacted the profitability and competitiveness of exporters (Hailu, 2015).

Despite pursuing import substitution strategies, efforts have been made by both regimes to promote diversification of export. For instance, during the second five-year plan of the Imperial era, even though the guiding policy direction was import substitution, initiatives had been taken to promote exporters engaged in non-traditional export-oriented production. Major incentives introduced includes, income tax holidays, strengthening and restructuring chamber of commerce, simplification of export trade licensing, establishment of trade attaches and provision of market study trainings (Debel, 2002).

Throughout the third-five-year development plan of the Imperial regime, foreign trade and export specifically received a great deal of attention. To increase the share of manufacturing export, high emphasis was placed on strengthening the hides and skin processing sub-sector. Diversification of mineral exports, such as gold, potash, and, others were also part of the launched plan. The move was expected to help the country boost its balance of payments. The plan envisaged registering a three-fold increase in non-agriculture export like textile, non-metallic, wood and, chemical products. To ensure the smooth implementation of the plan, the duty drawback scheme applied on import of inputs, raw materials, and other equipment was revised. Furthermore, monetary and fiscal incentives got introduced for foreign and domestic investors engaged in the export sector. Nevertheless, the country was not able to boost earnings from export at the level anticipated (Debel, 2002).

After taking power in 1974, the military government devised a ten-year strategic plan. The plan's key goal was to shift the country's export structure away from primary agricultural exports towards manufactured goods. Diversifying export products in the industrial, agriculture, and manufacturing sector; and expanding market destinations of export products were the two major initiatives undertaken. To realize these objectives, series of incentive instruments were introduced, including favorable tax rates, strengthening the chambers of

commerce and foreign exchange and tariff measures. Despite the measures taken, the efforts made to diversify and promote export by and large were unsuccessful (Hailu, 2015).

In both the Imperial and Military regimes, Ethiopian export products remain undiversified, with a focus on a few primary commodities such as coffee, chat, oilseeds, hides and skins, and pulses. This is due to the fact that both regimes used an overvalued currency, restrictive commercial policies, and high tariff rates that established a strong anti-export bias, as well as strongly inward-looking trade policies that favored import substitutions (Getahun, 2014).

After the EPRDF assumed power in 1991, along with the WBG and IMF the government, introduced a liberalization and structural adjustment program to tackle the external and internal imbalances of the economy. Amongst, reforming the foreign trade policy was a key priority area, which aimed at promoting export via product diversification. Measures introduced during the reform period include devaluation of the birr (140% against the US dollar), revising the tariff regime (from a max of 230% to 50%), simplifying the export and import licensing system, introduction of a duty drawback scheme, introduction of a foreign currency retention scheme, introduction of preferential interest rate schemes and the establishment of Ethiopian Export Promotion Agency in the year 1998 (Debel, 2002).

Furthermore, realizing the role of export in sustaining economic growth and development, the government has been making efforts to create conducive environment for expansion of export activities. The establishment of legal frameworks on export trade incentives schemes has been an area of focus since 1995. Since its establishment in 1995, the export trade incentive has been revised three times (2001, 2007 and 2012). Likewise, various directives concerning financial incentives has been issued the NBE (Hailu, 2015).

Numerous studies have been undertaken by many researchers to evaluate the effectiveness of financial and fiscal incentives. Regassa (2008) using the Difference-in Difference approach, analyzed the effect of export trade duty incentives and export credit guarantee schemes on export efficiency. The study's results showed that export incentives had a huge effect on the output of the export sector. It was, however, noted that the outcome should not be overemphasized without taking a close look at the government's costs, either in terms of foreign exchange or the opportunity cost of the funds to the country.

Fanta and Teshale (2014) examined the form and pattern of export incentive schemes and their impact on export growth in Ethiopia. Their study found that while incentives are positively correlated with export value and export volume, they are negatively correlated with the concentration of exports. In addition, the time series econometric analysis shows that both in the short and long term, financial and fiscal incentives have a statistically significant effect on export growth.

Gebreyesus and Demile (2017) analyzed the degree to which anti-export sentiment have been minimized by fiscal and non-fiscal schemes and motivated exporters. Their study showed that the incentives given to exporters were inadequate to enable the private sector to invest in export sectors. Moreover, companies that produce for the domestic market have been found to have almost equal incentives through investment promotion.

Getachew (2019) has investigated the impact of commercial banks export financing schemes on Ethiopia's export earnings. The study adopted a fixed effects model to check whether there a significant correlation between credit disbursed to exporters and the value of export. The author has identified a clear and positive influence of export credit on export earnings and has therefore advocated the need to increase the amount of credit disbursed to the export sector as well as diversifying of credit instruments.

Ahmed and Adinew (2019) examined the impact of export promotion policy incentives in the performance of the manufacturing sector of Ethiopia. The results of their study showed that government's lack of political engagement had a major effect on the implementation of export promotion policies aimed at improving the strength and propensity of export sales in priority industries.

Hailu (2015) examined the impact of export incentives on export growth in Ethiopia over the period 1990 to 2014. The findings of his study indicate that the country's export earnings have witnessed a sustained growth since the incentive schemes were implemented. Although the export earnings of the country are primarily from few primary commodities such as coffee, oilseeds, cereals pulses and hides & skins, the country's export diversification strategy seems to have borne fruit during the study period.

Wolde (2019) reviewed the impact of export trade incentives on national export performance from 2003-2018. The study adopted an explanatory research method with a combination of

time series and trend analysis. The time series statistical regression analysis indicated that the voucher scheme from fiscal incentive schemes and the export credit guarantee and the real effective exchange rate from the financial incentive schemes were statistically significant. Meanwhile, manufacturing bonded warehouse and duty drawbacks were found to be statistically insignificant. The study highlighted the necessity of continuously gauging the effectiveness of export trade incentive schemes; so that they don't deviate from the purpose they intend to serve.

Gemeda (2020) analyzed the role of export incentive schemes and Ethiopia's export performance and economic growth. The correlation analysis result of the study indicated that the overall export value and amount of main export product are gradually increasing as a result of the incentives. Furthermore, the study revealed that fiscal incentives and export value have a positive relationship meanwhile; the correlation between financial incentives and export value is negative. The author suggested that much remains to be done by the government regarding the provision of fiscal and financial incentives schemes in order to boost the export sector contribution to the economy.

2.4 Export incentives in Ethiopia (Policies and Regulations)

Under this sub-section the fiscal and financial incentives provided to exporters are thoroughly elaborated. The description provided on fiscal incentives is based on the Proclamation No. 768/2012. While the explanation financial incentives are based on the NBE Directives No. 67/2020 Amendment of Retention and Utilization of Export Earnings; NBE Directive No FXD/59/2019 Foreign Exchange Transaction in Industrial Parks Directives; NBE Directives No.48/2017 Amendment of Retention and Utilization of Export Earnings and Inward Remittance; NBE Directive No. FXD/62/2019 Foreign Exchange Management Directive and NBE Directive No. SBB/41/07 Transfer Duties and Responsibilities Related to Establishment and Operation of Export Credit Guarantee Scheme from NBE to CBE

A. Fiscal Policy (administration of custom duty and tax-related incentives):

To protect local industries and increase national revenue, the Ethiopian government levies tax on imported goods and raw materials. When exporters import raw materials to produce exportable items, the tax levied on inputs raises their cost of production and reduces their competitiveness in the international market. Hence, to enhance their profitability and ability to

compete with global firms, taxes levied on inputs are lifted, enabling them to purchase at global prices.

Ordinarily, two types of methods are adopted to exempt exporting firms from custom duties. The first option is by lifting tax levied on imported inputs and raw materials to produce exportable products, while the second option is by reimbursing the tax paid on inputs when the produced products are exported. The export trade duty incentive scheme proclamation No768/2012 introduced by the government allows exporter to benefit from the following incentive schemes.

Duty draw-back Scheme: refers to the method by which duties paid on raw materials and accessories utilized in the process of producing commodities are refunded to the payers upon the exportation of processed commodities. Beneficiaries of this scheme include producer exporters, indirect producer exporters, raw material suppliers and exporters who are certified by Ministry of Trade and Industry.

Voucher Scheme: A firm must be granted a voucher book to benefit from this incentive scheme. A voucher book is a document issued by the Ethiopian Custom Commission to be used by exporters for recoding the amount of tax levied on raw materials imported or purchases from bonded supply warehouses. Beneficiaries of this system include producer exporters, indirect producer exporters, and raw material suppliers who obtained eligibility certificates from the Ministry of Industry and trade.

Bonded Export Factory Scheme: refers to a tax-free warehouse where imported raw materials free of customs duty are stored. The warehouse is jointly supervised by Ethiopian Custom Commission and by the exporting company who is eligible for the service. Beneficiaries of this incentive scheme are (1) firms exclusively engaged in the production of exportable commodities, (2) those who received eligibility certificates from the Ministry of Trade Industry, and (3) manufacturing plants that managed to fulfill the standards set by the Ethiopian Custom Commission. The Ministry of Trade and Industry provides a directive specifying the criteria demanded to obtain a certificate of eligibility to become beneficiary of the incentive scheme, while the Ethiopian Custom Commission provides a directive stipulating the standards that must be met by the manufacturing firm owned by beneficiaries of the scheme.

The Bonded Export Manufacturing Warehouse Scheme: Refers to a warehouse where all duty-free imported raw materials and products manufactured from these raw materials are stored and jointly supervised by the Ethiopian Custom Commission and the factory. Beneficiaries of this incentive scheme includes firms who are engaged exclusively in production of export products, have received certificate of eligibility from the Ministry of Trade and Industry and those having manufacturing warehouse which fulfill the standards set by the Ethiopian Custom Commission.

The Bonded Inputs Supplies Warehouse Scheme: refers to a warehouse where duty-free raw materials imported by licensed suppliers are stored until they are sold to the manufacturer. The warehouse is jointly supervised by the Ethiopian Custom Commission and the input supplier. Beneficiaries of this scheme are those who have received certificate of eligibility from Ministry of Trade and Industry and those having manufacturing warehouse which fulfill the standards set by the Ethiopian Custom Commission. Beneficiaries of the voucher scheme, such as producer exporters and indirect producer exporters, may purchase inputs from a bonded input supplies warehouse by causing the amount of duty payable on the inputs to be reported on the voucher book.

The industrial zone scheme: Refers to an area exclusively dedicated to industrial activities with integrated infrastructure facilities and policy incentives. Beneficiaries of this incentive schemes are those firms who established companies in the industry zone that meet the requirements set by Ministry of Trade and Industry and Ethiopian Investment Commission. Per Article 22 of the Export Trade Duty Incentive Scheme proclamation No768/2012, provisions have been made regarding the ratio of inputs output coefficient and total industrial tax returns. The Ministry of trade and Industry provides guideline on the input-put ratio, while the Ministry of Finance issued a guideline on total industrial tax returns.

In addition to the above-mentioned incentive schemes, the government introduced tax relief methods aiming to make exportable products competitive in the international market. The following incentives are provided in relation to tax relief:

- ✓ Although it varies from sector to sector, investors are exempted from business income tax from 4 to 10 years. Additional 2 years are granted if the firm is an exporter.
- ✓ Foreign nationals working in the industrial zone are exempted from income tax for 5 years.

B. Monetary Policy Incentives (Credit provision and interest rate)

Monetary policy is well-known to play an important role in boosting foreign currency earnings from export. Accordingly, the following monetary policy measures are introduced by the government to encourage exporters.

1. Credit Policy

External Loan and Suppliers Credit: According to NBE Directive No. FXD/47/2017, foreign loans are facilitated for firms who are engaged in export activities. This considerably contributes to addressing challenges related to access to finance.

Loan Provision by Development Bank of Ethiopia

The government has set up an Export Credit Guarantee Scheme through the Development Bank of Ethiopia to ease the shortage of finance (NBE Directive No.SBB/41/07). This incentive scheme enables exporters (except coffee exporters) to borrow from private banks, to buy inputs and raw materials, the Development Bank guaranteeing 80 percent of the loan (plus the interest).

The provision of financing for priority sectors such as manufacturing, commercial agriculture, mining and Agro processing through the Development Bank of Ethiopia can be seen as an incentive for producers and exporters engaged in these sectors.

In addition, the loans provided by Development Bank of Ethiopia to priority sectors has a repayment period extending to 20 years and a grace period up to 5 years, which can be considered as an incentive scheme. Besides, the loans provided by the Development Bank of Ethiopia to priority sectors have a repayment period extending to 20 years and a grace period is up to 5 years, which can be considered as an incentive scheme.

Providing adequate collateral is one of the biggest obstacles faced by many investors and exporters. To alleviate this challenge, the appraised project itself is considered as collateral for the loans provided by the Development Bank of Ethiopia. On a related note, the bank provides 85% of the initial capital requirement.

Another incentive provided by the Bank is the interest rate return system. This incentive scheme states that if a firm export 80% of the products produced, 3.5% of the loan interest rate will be reduced. Meaning, if the interest rate on a loan is 9.5%, and the firm exports accordingly 3.5% of the loan will be reduced enabling him to pay at a 6% interest rate. Manufacturing firms

are charged less service charge when they open a letter of credit (0.5% while others pay 3.5 %).

2. Interest rate Policy

The interest rates charged by commercial banks on exporters are relatively low compared to the interest rates they lend to other non-exporting sectors (see Table 1).

Table 1: Interest rates charged by banks on different type of loans

	For Exporters		For non-exporters	
	Loan Type	Interest rate (%)	Loan Type	Interest rate (%)
Commercial Bank of Ethiopia	Pre-shipment credit facility	7.5	Condominium Loan	9.5
			Machinery Equipment Lease Financing	10
			Lending Rate (for other sectors)	11.5
Nib International Bank	Advance on Export Bills	11.5 – 13.5	Term loan (non-export)	16.25 – 18
	Term Loan on Export	9 – 12	Import	18.25 – 21.75

Source: National Bank of Ethiopia

In addition, the Development Bank of Ethiopia provides the following interest rates as an incentive for exports.

1. If grade one exporters manage to export 80 % of their total output, the interest rate charged on loan will be 3% higher than the bank's lowest bond interest rate of 6%.
2. If grade two exporters manage to export 60-80% of their output, the interest rate charged on loan will be 3.5% higher than the bank's lowest bond interest rate of 6%.

NB: The interest rate Development Bank of Ethiopia charges on non-exporters is 12%.

3. Exchange Rate Policy

A) Foreign Exchange Transaction in Industrial Parks (NBE Directive No FXD/59/2019) allows: -

- ✓ The Directive permits investors to purchase and sell inputs or raw materials that are produced by others investors either within the same industrial park or across industrial parks by using their own foreign currency or retention account.

- ✓ The new directive allows investors in the industry park to pay expat employees salary in foreign currency either from their own foreign currency account or retention account.

- ✓ The Directive allows free repatriation of capital and profit

B) Retention and Utilization of Export Earnings and Inward Remittances (NBE Directive No. FXD/ 48/2017): The directive allows exporters of goods and services to retain 30% of their earnings in foreign currency by opening retention “account A” for indefinite period of time. The rest 70% of earnings from export shall be kept on a special “account B” for up to 28 days. Within the 28 days the exporters are allowed to use the foreign currency in account B for variety of services (to pay foreign loan or inputs imported for production purpose). After 28 days, the amount left in account B will automatically be converted into local currency in the prevailing buying exchange rate.

C) Transparency in foreign currency allocation and foreign exchange management (as amended) Directive No. FXD/62/2019: The revised proclamation requires commercial banks to prioritize foreign currency request for the import of inputs and raw materials while allocating foreign exchange. This is aimed to reduce the delays in production (exportable products) following the shortage of foreign currency needed to import inputs and raw materials. The incentive also applies to producers who supplies to the local market.

D) Starting from the year 1992 the government of Ethiopia has been making efforts to revise the value of birr against dollar to encourage exporters; however, at current, birr is still overvalued negatively affecting export activities.

C. Other incentives

In addition to the aforementioned incentives (fiscal, financial, and exchange rate related) the government provides the following incentives to investors operating in the industrial park.

- The government shares the cost of textile and leather exporters in the industrial parks for the cost they incurred in recruitments and training process.
- Investors in industrial parks can access land conveniently at a lower cost.
- Various services (customs, banks, transport and logistic water, electricity etc...) are provided under one stop shops.

- Companies or managers in the industrial park are allowed to hire foreign nationals in the position of management, supervisor, trainers or technical expert.
- If a foreign investor in the industrial park reinvested his profit, they will be exempted from fulfilling minimum capital requirement.
- Unless the social return of a development project outweighs the returns from the industrial parks (being provided the appropriate compensation), it is almost impossible to evict investors in the industrial parks redevelop the industrial zones.

2.5 Countries Experience

In this section, the experience of eight developing and neighboring countries, namely Vietnam, Malaysia, Turkey, Bangladesh, Kenya, Mauritius, Sudan, and Djibouti, have been reviewed to evaluate the effectiveness of export incentives provided in Ethiopia. Based on the review, the study extracted the gaps identified by export incentives in Ethiopia

Vietnam

Fiscal Incentives

Tax Holiday: Exporters are granted four years' tax relief periods (two years for service and four years for manufacturers). If local producers export a 50% and above, they are given a one-year tax relief period.

Additional incentives related to tax relief: After tax relief periods are over, exporters are given 50 % discount for additional four years.

Exemption from import and export tax as well as VAT: Exported goods are not subjected to tax and VAT. They are also exempted from paying tax while importing raw materials, spare parts, machinery, and other related materials used for the production of exportable items. Furthermore, exporters are not subject to any tax on exports for re-import or import for re-export.

Duty drawbacks and Bonded Manufacturing Warehouse Scheme: Under the duty drawback scheme, custom duties paid on raw materials and accessories and used for the process of producing commodities are refunded to the payers after exporting the final products. Meanwhile, bonded manufacturing warehouse is a warehouse where all duty-free imported raw materials and products manufactured from them are stored (World Bank Group, 2020; James, 2013).

Financial Incentives

Accesses to credit and concessional Interest rate: The Development Bank of Vietnam provides medium and long-term loans with a concessional interest rate for exporters. This scheme is known as Development Assistance Fund.

Bankruptcy Support System: To minimize the losses incurred by agriculture exporters following price fluctuations in the international market the governments pay exporters interest on loans. This scheme is known as Government Export Support Fund.

Productivity Improvement Support: Government provides financial support to exporting companies who are working towards maintaining international standards and promoting their brands.

Devaluation: The Central Bank of Vietnam has repeatedly devaluated the dong against the dollar. For instance, between 2014 to 2016, the Central bank devaluated the dong against the dollar five times (EY, 2020).

Institutional and policy Incentives

Bilateral and multilateral trade agreements: Vietnam has 26 Free Trade Agreements (FTAs), enabling exporters to have access to international markets.

Deepening the private sector's role in exports. Starting from 1989 the government privatized state-owned enterprises intending to create a favorable environment for the private sector. This has significantly contributed to increasing the export sector.

Foreign Companies are allowed to export other products: Starting from the year 1998, foreign-owned enterprises are allowed to export products other than those they produced.

Institutional Support: Vietnam has established a national Export Promotion Agency that supports the growth and diversification of the export sector (Van, 2019).

Malaysia

Fiscal Incentives

Tax Holiday: Exporters are exempted from paying tax from 5 to 8 years and a system known as "Pioneer status tax incentive" is put in place to ensure its effective implementation.

Export Allowance: While paying tax, exporters are exempted from paying 2% of corporate income tax. In addition, if a firm manages to increase its sales from export by 50%, it will be taxed for only 50% of the increased amount.

Accelerated Depreciation Allowance: After tax relief periods are finalized the accelerated depreciation allowance is applied to the building and equipment set up in the exporter's factory. While non-exporting firms assume a 5% annual depreciation rate for buildings, exporting companies assume a 40% annual depreciation rate.

Double deduction of Expense: At the end of the tax relief period, exporters are eligible to double tax deduction schemes for expenses they incurred for advertisement, feasibility studies, business visits, and participation in international trade fairs.

Labor Utilization Relief: Exporters are subject to labor utilization relief based on the number of permanent employees they hire.

Exemption from import and export tax as well as VAT.

Firms engaged in R&D and selling their output to exporters are exempted from business income tax (UNCTAD, 2020).

Financial Incentives

Support on interest payments: Malaysia's central bank pays 40% of exporters interest on a loan. This system is known as the "Exporters Credit Refinancing scheme".

Retention account: Investors engaged in the export sector are allowed to keep 25% of their foreign earnings on trade foreign currency account. And they can use it to pay for a variety of international services.

Priority in access to foreign exchange: The Malaysian government's export-oriented manufacturing policy, which has been in place since 1971, prioritizes exporters to access foreign currency to import inputs and raw materials.

Devaluation: The Central Bank of Malaysia has provided policy assistance since 1997 to reduce the value of the Malaysian ringgit against the dollar. In 1998, for example, the national currency devaluated by \$ 39.5 percent (the largest devaluation since the 1960s) (UNCTAD, 2020).

Institutional and policy Incentives

Bilateral and multilateral trade agreements: Malaysia has 34 Free Trade Agreements (FTAs), which are assisting exporters to expand their international market accessibility.

Institutional Support: Established a national Export Promotion Agency that supports and monitors the export sector (Tuomi, 2012).

Turkey

Fiscal incentives

Tax Holiday: Exporters are exempted from paying corporate income tax for 8 years.

Exemption from import and export tax as well as VAT:

- Exporters are exempted from paying tax while importing raw materials, spare parts, and machinery for producing exportable products.
- Any indirect tax exporters incurred while shipping their products will be refunded after the products are exported.
- Exporters who earn a lot of foreign currency will benefit from an additional tax return system (5% refund for those earning \$ 4-15 million, 10 percent refund for those earning more than \$ 15 million).
- About 0.05 % of exporters' income will be considered as an expense to reduce their corporate income tax.
- Exporters do not pay a production tax (World Bank Group, 2019)

Financial Incentives

Export Credit system with preferential interest rate: Under this scheme exporters are provided with a negative real interest rate from Turk Eximbank. The scheme enables exporters to pay 25% of their loans at a lower interest rate if they manage to generate the expected level of foreign currencies.

Support for private banks that support export: The Central Bank of Turkey provides financial assistance to private banks that lend at a low-interest rate to exporters. The private banks do not pay tax on loans they lend to exporters.

Devaluation: The Turkish Central Bank has repeatedly depreciated the Turkish lira against the dollar. For example, following the Central Bank's foreign exchange policy reform, from 1979 to 1988, the national currency devaluated against the dollar by 55%.

Retention account: Exporters are allowed to keep a portion of their earnings in dollar and use it for various business activities.

Priority in access to foreign exchange: When exporters want to access foreign exchange to import raw materials, they are prioritized over other sectors. (Especially when the exchange rate gap between the black market and the legal market widens) (Engin and Rüya, 2012).

Institutional and policy Incentives

Bilateral and multilateral trade agreements: Turkey has 20 Free Trade Agreements (FTAs), aiming to create access to international markets (Sak, 2019).

Bangladesh

Fiscal Incentives

Tax Holiday: While calculating the tax relief period, year and place of establishments are considered. An investment established in the export processing zone before the year 2012 will be provided a tax relief period lasting for ten years

Minimum wage: The government has set the minimum wage for the ready-made garment industry. The minimum wage directive is revised every five years. In addition, employees are provided with additional benefits such as rent allowance, health insurance, transportation allowance, meal allowance, part-time allowance, and bonus.

Additional incentives after tax relief periods: By the end of tax relief periods, a policy incentive that encourages economic of scale is put in place to motivate exporters to expand their production activities. For instance, imported machinery is subjected to accelerated depreciation. In addition, at the end of the tax relief period, exporters will be exempted from 50% of corporate income tax.

Exemption from import and export tax as well as VAT: Imported raw materials, machinery, office equipment, spare parts, and construction materials to produce exportable items are exempted from customs duties. On a related note, exporters are subjected to VAT refund while purchasing packaging materials and export-related services (E.g., legal services concerning export). Samples imported to modify and research on exportable items are exempted from tax. Exported goods are neither subjected to tax nor VAT and inputs imported for research and development purpose are exempted from tax

Duty drawbacks and Bonded Manufacturing Warehouse Scheme:

- **Duty drawbacks:** a tax levied on raw materials and consumables used to produce exportable products are returned to them when the goods are exported (refunds are made through commercial banks).

Bonded Manufacturing Warehouse Scheme: is a warehouse where all duty-free imported raw materials and products manufactured from them are stored. In Bangladesh, an exporter who uses domestic raw material is allowed to import 50-70 % of equipment and raw materials free of customs duties (Sanjay and Malouche, 2016).

Financial Incentives

Export Credit Guarantee Scheme:

- The government has set up an export credit Guarantee scheme through the Development Bank of Bangladesh to encourage exporters. The system allows exporters to borrow money from private banks, the development bank guaranteeing 90% of the loan (plus interest).

Pre-loan service and export loan adjustment period: Pre-loan services are provided to new exporters. In addition, they are allowed to extend a loan repayment period from 180 days to 270 days.

Access to credit with concessional interest rate: The interest rate charged by commercial banks on export loans is relatively low compared to the interest rates lent to other sectors.

Insurance incentives:

Exporters with unique products are reimbursed for the cost they incurred on fire and shipping insurance.

Credit card and offshore banking services: Exporters are allowed to have credit cards when they are on business trips, enabling them to avoid the inconvenience of cash transactions. Exporters in the export processing zone are facilitated to access foreign loans.

Loan services to import raw materials: If exporters receive orders from importers abroad, they can obtain a loan to import raw materials by showing the order they received.

Interest is paid to deposits made on retention accounts: Exporters in Bangladesh are allowed to deposit a certain amount of their foreign exchange earnings in their Exporters' Retention Quota Account and, they earn interest on the account. The interest payable to such accounts is determined by the agreement between the account holder and the bank. The rate commensurate with the country's euro deposit rate.

Retention account: usage of foreign currency from export earnings is regulated in two ways:

- The policy allows exporters in the export processing zone to deposit all earned foreign currency in a retention account and use it at any time. In addition, the policy states that exporters can repatriate capital and profit without restriction.

- However, the law stipulates that exporter outside the processing zone can use only 40% of the earning in foreign currency for an indefinite period.

Devaluation: Aiming to encourage exporters in Bangladesh, the country's currency had devaluated against the dollar 130 times between 1970 to 2002. In addition, the government made a continuing effort to make Bangladesh's currency easily convertible to other currencies (Eg. UD dollars) (Chowdhury 2019).

Institutional and policy Incentives

Bilateral and multilateral trade agreements: Bangladesh has signed 12 free trade agreements with various countries to boost export activities.

Export Policy: Since 1996 Bangladesh has launched and implemented a national export policy with a four-year cycle.

Institutional Support:

- Established a national Export Promotion Agency that support the growth and diversification of export sector.
- Established an Export Processing Zone Authority reports to a board of directors accountable to the Prime Minister (Sanjay and Malouche, 2016).

Kenya

Fiscal Incentives

Tax Holiday: Investors in export processing zone are exempted from paying tax for the first 10 years. They are also exempted from paying dividend tax for 10 years. With the aim of increasing production and productivity, employees working in export processing zone earning less than 11,180 Kenyan shillings are exempted from paying tax from bonuses and overtime earnings.

Exemption from import and export tax as well as VAT: Imported raw materials, machinery, office equipment, spare parts and construction materials for the purpose of producing exportable items are exempted from custom duties. Exporters are exempted from VAT. Furthermore, exporters outside export processing zone will be refunded within 60 days of paying VAT.

Duty drawbacks and Bonded Manufacturing Warehouse Scheme:

Duty drawbacks: under this system the tax levied on the raw materials and consumables used to produce exportable products are returned to them the goods are exported.

Bonded Manufacturing Warehouse Scheme: this system enables exporters to take advantage of duty-free imported raw materials stored in separate warehouses.

Additional incentives after tax relief periods: After tax relief periods are over exporters are subjected to 25% business income tax rate for the proceeding 10 years. In addition, a policy that encourages economic of scale is put in place. A case in point is the investment deduction scheme, which is applied when exporters build additional building and import machineries (Action Aid, 2016).

Financial Incentives

As Kenya has a liberal financial system, financial incentives are very few.

Access to credit for foreign companies: The Kenyan government has introduced an initiative that enables foreign investors to obtain domestic and foreign loans that can support their exports activities.

Retention account: Exporters in Kenya can deposit 100% of their earning in foreign currency in retention account for indefinite period of time and use it at any time. In addition, exporters can repatriate capital and profit without any restriction.

Devaluation: In order to encourage exports in Kenya, between 1980 to 1991, on average Kenyan shilling devaluated by 27% against the dollar (Nthiwa, 2012).

Institutional and policy Incentives

Bilateral and multilateral trade agreements: Kenya has signed trade agreements with 30 countries to nurture the country's export performance.

Export Development and Promotion Strategy: With the aim of supporting the export sector, Kenya has implemented an Integrated National Export Development Strategy.

One Stop Service: In Kenya, exporters receive a one-stop-shop service, enabling the issuance of licenses to exporters within 30 days (TJN, 2012).

2.6 The Research Gap

As can be observed from section (1.2), though limited in number, considerable empirical studies are carried out to analyze the relationship between export and export incentives. This study wishes to future expand and contribute to the argument on export incentives. The study attempted to add to the existing literature by adopting the Autoregressive Distributed Lag (ARDL) to co-integration model. The research mainly examined the short and long-run association between custom duty exemption and export credit on national export performance. While undertaking the regression analysis, in addition to the main variable of interest, the study analyzed the impact of GDP, Inflation, and FDI as they are proven to affect national export performance (see section 3.5, table 2).

2.3 Conceptual Framework

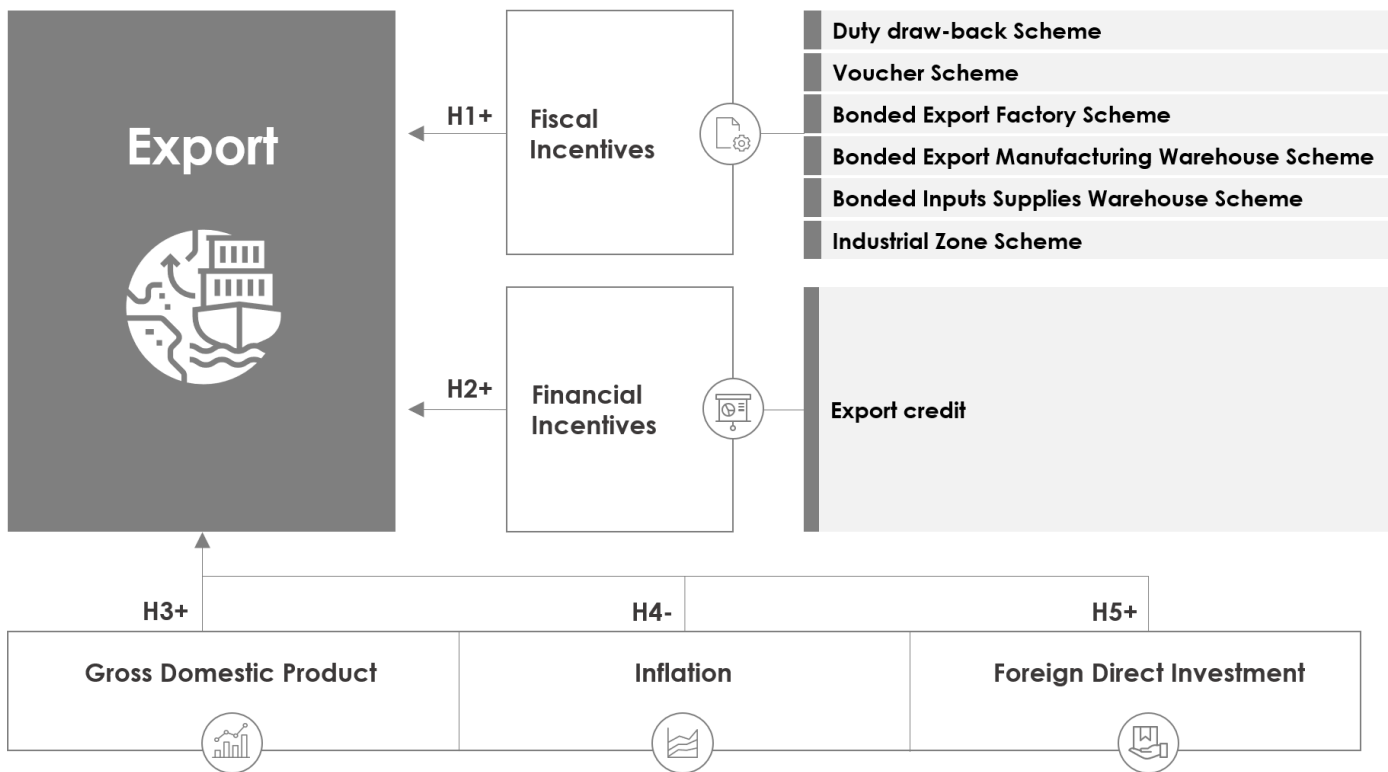


Figure 1 Conceptual Framework

CHAPTER THREE: RESEARCH METHODOLOGY

In this section the methodology applied while carrying out the study is presented. It includes data research approach, research design, variable definition and data source, data analysis, model specification and estimation procedure and ethical consideration.

3.1 Research Approach

This study investigated the effects of export incentives on national export earnings by adopting a quantitative and qualitative research methodology. Considering the research questions and objectives raised by the study, the quantitative research approach is considered to be the most appropriate to realize its purpose. As indicated by Haq (2014) a quantitative analysis is a scientific and logical method used to examine quantitative properties or phenomena, as well as their relationships. As the study formulated a hypothesis to test an existing theory, it followed a deductive approach. Furthermore, including qualitative approach enabled to deeply understand and support the quantitative findings.

3.2 Research Design

The study employed a non-experimental design approach to establish a relationship between the dependent variable (export value) and the independent variables custom duty exemptions, export credit, GDP, inflation and FDI. In a non-experimental research design a statistical analysis is undertaken to comprehend the relationship between the dependent and independent variable, unlike an experimental research design where independent variables are manipulated to monitor an outcome (Bricki, 2007). Even though the main variable of interest are custom duty exemption and credit disbursed to exporters, the study also included GDP, Inflation and FDI as independent variables affecting the performance of export. The rationale for including the three additional independent variables is explained in section 3.3. The study adopted a time series economic analysis to analyze the effects of the above specified independent variables on enhancing national export performance in the past twenty-five years.

3.3 Method of Data Analysis

The purpose of this research is to investigate short-run and long-long effects fiscal and financial incentives on national export performance. To realize this objective the study used the ADRL model. The study adopted this model since it has three major advantages over other cointegration

methods (1) the ADRL models doesn't necessarily require all the variables to be integrated of the same order. It is possible to be applied when the variables are integrated of order one $I(1)$ or integrated of order zero $I(0)$. (2) The model is more efficient when applied in small and finite data sizes. (3) ADRL model enables to obtain unbiased estimates of a long-run model. Furthermore, in ADRL model the combination of exogeneous and endogenous variables can be uses, unlike a VAR model where only endogenous variables are used (Uko & Aham, 2016).

Certain pre-estimations, such as unit root and co-integration, are essential before carrying out static and dynamic analysis, as conclusions derived from this study may not be valid without them. Amongst, the unit root test is considered as a mandatory test prior to specifying an ADRL model (Ghulam,G et al., 2018).

EViews version 9 is used to analyze the data collected. The EViews enables to efficiently and quickly manage data, while performing statistical and econometric analysis. Moreover, the softer ware is user-friendly to produce graphs, tables and statistical tests (Johnson, 2000).

Descriptive analysis is made on the overall performance of the export sector, including values and volumes, trends of growth, share in international market, diversification of market and products using graphs, tables and charts. Furthermore, narrative description are provided in chapter two on the types and nature of fiscal, financial and institutional incentives introduced in Ethiopia to support the performance of export sector.

3.4 Model specification and Estimation procedure

For a time-series data ensuring the stationarity of variables is a mandatory condition. Stationarity implies that the average and variance of time-series does not vary across time. If the time series is non-stationary, it can only indicate the relationship in a particular period. Furthermore, a regression among two non-stationary time series may potentially lead to spurious regression (Dickey & Fuller, 1979). Hence, for this study it is highly vital to determine the stationarity of variables prior to estimating the ADRL model. From the result of the unit tests, none of the variables can be integrated of order two $I(2)$. The ARDL model can be specified if the variables are integrated of different orders. Meaning, the model can have combination of variables that are $I(0)$ and $I(1)$ order of integration. Likewise, the model can be specified if all the variables are

integrated of order one or stationary at the first difference I (1). Based on the result from the bound test result, if the variables understudied are cointegrated one can specify both short-run ADRL and long-run VECM models. In scenario where the variables are not cointegrated, only the short-run (ADRL) model is specified. ARDL model contains the lagged value(s) of the dependent variable, the current and lagged values of regressors (explanatory variables). Prior to specifying the ADRL model the hypothesis for the bound tests must be set (Shrestha & Bhatta, 2018).

Hypotheses:

$$H_0: b_{1i}=b_{2i}=b_{3i}=0 \quad (\text{where } i=1,2,3)$$

$$H_1: b_{1i} \neq b_{2i} \neq b_{3i} \neq 0$$

H₀, the null hypothesis indicates that the coefficients of the long run equation are all equal to zero and by that implying there is no cointegration among variables.

H₁, the alternative hypothesis indicates that the coefficients are different from zero, indicating long term association among variables.

The generalized ADRL model is specified in the following way: -

$$Y_t = \gamma_{0j} + \sum_{i=1}^p \delta_j Y_{t-1} + \sum_{i=0}^q \beta' X_{t-i} + \varepsilon_{it} \quad (2)$$

Where;

Y_t is the dependent variable being explained by its lag and also the current and the lagged values of the regressors;

P,q are optimal lag orders, p is associated with the lags of the dependent variable while the lagged values of the regressors take alphabet q. The lag lengths p,q may not necessarily be the same.

X_t are the regressors which can be of order I (0) or I (1) and they can be co-integrated;

β and δ represents the coefficients that are being estimated;

γ is the intercept of the constant in the model

i=1..., k represents the number of variables in the model

ε_{it} is a vector of the error terms

The ADRL model for *lnExp* is estimated in the following way if the bound test to co-integration fails to reject the null hypothesis:

$$\Delta \ln Exp_t = \beta_0 + \sum_{i=1}^p \beta_1 \Delta \ln Exp_{t-i} + \sum_{i=1}^q \beta_2 \Delta \ln FISIN_{t-1} + \sum_{i=1}^q \beta_3 \Delta \ln FIN_{t-i} + \sum_{i=1}^q \beta_4 \Delta \ln GDP_{t-i} + \sum_{i=1}^q \beta_5 \Delta \ln INF_{t-i} + \sum_{i=1}^q \beta_6 \Delta \ln FDI_{t-i} + e_t \quad (3)$$

If the bound test to co-integration rejects the null hypothesis, it means that there is cointegration among the variables, hence the Error Correction Model (ECM) or the VECM is specified in the following way: -

$$\Delta \ln Exp_t = \beta_0 + \sum_{i=1}^p \beta_1 \Delta \ln Exp_{t-i} + \sum_{i=1}^q \beta_2 \Delta \ln FISIN_{t-1} + \sum_{i=1}^q \beta_3 \Delta \ln FIN_{t-i} + \sum_{i=1}^q \beta_4 \Delta \ln GDP_{t-i} + \sum_{i=1}^q \beta_5 \Delta \ln INF_{t-i} + \sum_{i=1}^q \beta_6 \Delta \ln FDI_{t-i} + \lambda ECT_{t-1} + e_t \quad (4)$$

Where: -

Δ implies the different operators;

β_0 denotes the constant term;

p,q represents the optimal lag length;

i shows the number of lags;

$\beta_1 - \beta_6$ implies the short-term dynamics of the variables;

e_t denotes the error term

The first part of the equation (colored in blue) represents the first short run equation while, the second part of the equation (colored in red) represents the long run equation. The causal effect of the short-run equation is represented by the t-statistics of the explanatory variables (short run coefficients); meanwhile the long-run causal effects is captured by the significance of the parameter λ . The long-run relationship between the variables indicates that there is Granger-causality in at least one direction which is determined by the t-statistics of the lagged error-correction term.

$$\Delta \ln Exp = \beta_0 + \sum_{i=1}^p \beta_1 \Delta \ln Exp_{t-i} + \sum_{i=1}^q \beta_2 \Delta \ln FISIN_{t-1} + \sum_{i=1}^q \beta_3 \Delta \ln FIN_{t-i} + \sum_{i=1}^q \beta_4 \Delta \ln GDP_{t-i} + \sum_{i=1}^q \beta_5 \Delta \ln INF_{t-i} + \sum_{i=1}^q \beta_6 \Delta \ln FDI_{t-i} + \theta_1 \ln Exp_{t-1} + \theta_2 \ln FISIN_{t-1} + \theta_3 \ln FIN_{t-1} + \theta_4 \ln GDP_{t-1} + \theta_5 \ln INF_{t-1} + \theta_6 \ln FDI_{t-1} + \epsilon_t \quad (5)$$

Where; $\theta_1 - \theta_6$ represents the long-run association of variables;

3.5 Data Type and Sources

The study used both primary and secondary source of data. The research collected secondary data from the MoF, ECC, NBE. Data on fiscal incentives (custom duty exemptions) is collected from

the MoF and ECC. Export volume, financial incentive (export credits), GDP, FDI and inflation data are collected from the NBE. Regarding primary data, the interviews are carried out high-level experts in the Ethiopian Custom Commission, National Bank, and Ministry of Trade and Industry. The natural logarithms of variables are used to remove problems related to heterogeneity, which mostly occurs in time series data.

Table 2: Variable description and Data Sources

Variable	Abbreviations	Description	Data Source	Obs Period
Export Volume	lnExp	The amount of money earned from goods export trade.	NBE	1995 - 2020 EC
Fiscal Incentives	lnFISIN	The amount of government revenue forgone from custom duty exemption schemes, such as voucher, duty draw-back, bonded export factory, bonded export manufacturing warehouse, bonded inputs supply warehouse schemes.	MoF and ECC	1995 - 2020 EC
Financial Incentives	lnFIN	The amount of credit disbursed by CBs and DBE to exporters at preferential interest rates.	NBE	1995 - 2020 EC
GDP	lnGDP	The total value to outputs produced within the border of Ethiopia. Export is inextricably linked to GDP, and GDP is inextricably linked to the nation's economy (Brue, 2008). Increased economic growth would result in more exports because if production is high, there will be excess output above local demand, allowing a country to export more (Tsen, 2007).	NBE	1995 - 2020 EC
Inflation	INF	CPI, the renowned indicator to measure the average change in price for a given basket of goods and services is used in the study. In a theoretical sense, inflation and export are inversely proportional. Inflation raises the price of goods and services on the global market. Only if demand for domestic export in other nations is inelastic will export of products and services increase (Fleming, 1962; Mundell, 1963). Therefore, inflation basically affects export through its impact on exchange rate.	NBE	1995 - 2020 EC

Foreign Direct investment	InFDI	The total inflow of Foreign direct investment in Ethiopia. FDI is expected to have a positive impact on the overall performance of export. It considerably contributes to transform the composition of exports as well as spillover effects to stimulate domestic production activities. In addition, FDI is expected to expedite knowledge and technology transfer (UNCTAD, 2004).	NBE	1995 - 2020 EC
---------------------------	-------	---	-----	-------------------

Source: Author's compilation

3.6 Ethical Consideration

While conducting this research, critical ethical considerations are taken into account. All participants are prior informed about the purpose of the study, the methods of analysis and reporting adopted to compile the data collected from them. All confidential information received from institutions and individuals are kept confidential. All types of communication concerning this research are done in transparent method.

CHAPTER FOUR: RESULT AND DISCUSSION

Based on the econometric framework presented in chapter three, this chapter discuss the empirical findings from the analysis undertaken. The study analyzes the outcome of the variables during the observation period by using graphs and tables. This section is divided into three sub-sections. In the first part, a trend analysis is carried out to illustrates the patterns of the variables included in the study. In the second part, descriptive analysis is carried out. In the last section presents the findings of econometric analysis along with various test.

4.1 Descriptive Statistics Results

4.1.1 Export

In the past fifteen years, export has shown an expansive growth, particularly starting from the year 2005. This has been attributed to many factors, including the launching of consecutive development plans, privatization, deregulation, devaluation of the local currency against the US dollar, launching of fiscal, financial as well as institutional incentive schemes, and gradual change of international price (Emako, 2020). As one can observe the figure below, the growth of export volume has started showing a growing trend starting from the year 2004 and took a shooting rise from the year 2010. The sudden spike observed in 2010, aliens with the launching of the first Growth and Transformation Plan (GTP). Starting from the year 2014 export has shown a continuing declining trend until the year 2018. In the past two years, earnings from export have started to peak upward.

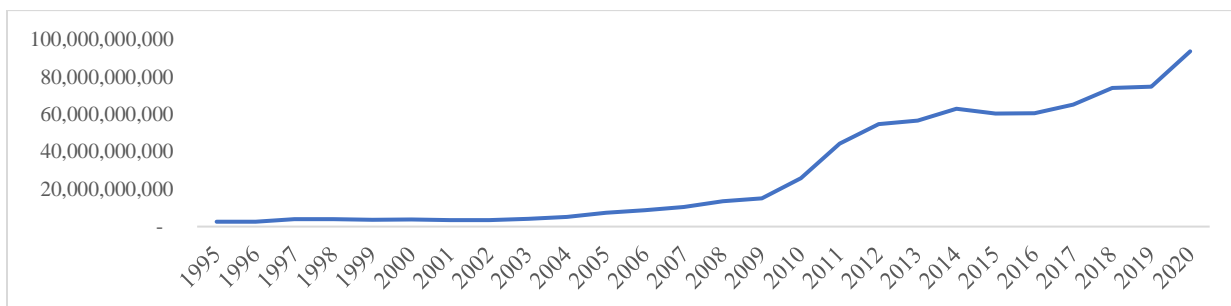


Figure 2: Trend of Export Volume

Author's computation (Source NBE, 2020 and WBG database)

Despite the encouraging performance observed in the volume of export (in birr), the share of export to GDP has been showing a decreasing trend. Predominantly, starting from 2014 it has exhibited a plunging trend. On top that, Ethiopia's export revenue has not exceeded \$ 3 billion in the

country's history. Factors affecting export performance includes low productivity, weak domestic and international market linkage, struggling to competence in quality and price as well as improper implementation of incentives instruments (Gemechu, 2002).

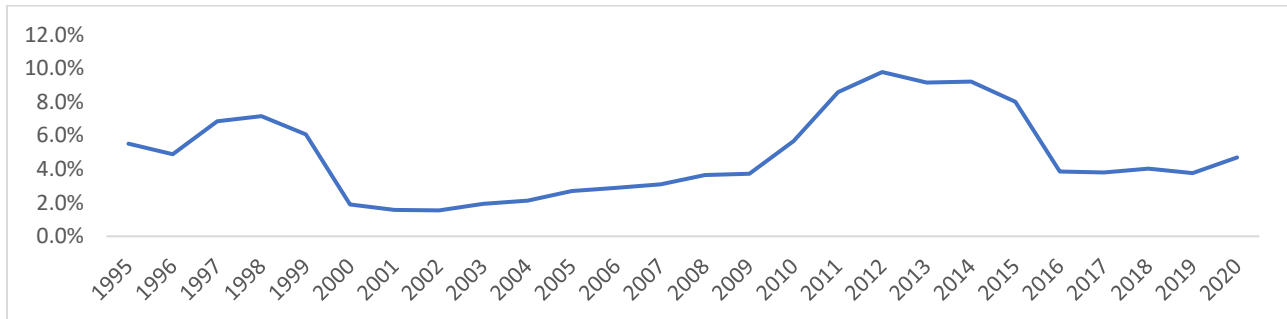


Figure 3: Export to GDP Ratio

Author's computation (Source NBE, 2020 and WBG database)

4.1.2 Fiscal and Financial Incentive

The figure below demonstrates the fiscal incentives granted in the form of custom duty exemption and the amount of export credit provided. Incentives provided under custom duty exemptions provided in the form of voucher, duty drawback, manufacturing bonded warehouse, etc... Similar to the trend observed in export, starting from 2004, the amount forgone government revenue from custom duty exemption has been showing an increasing trend. Concomitantly, the spiking jump is observed in the year 2010, a period where ambitious development plans was launched. Meanwhile, the amount of credit extended to exporters shows a steady pattern. Nonetheless, starting from the year 2017 it is showing an increasing trend.

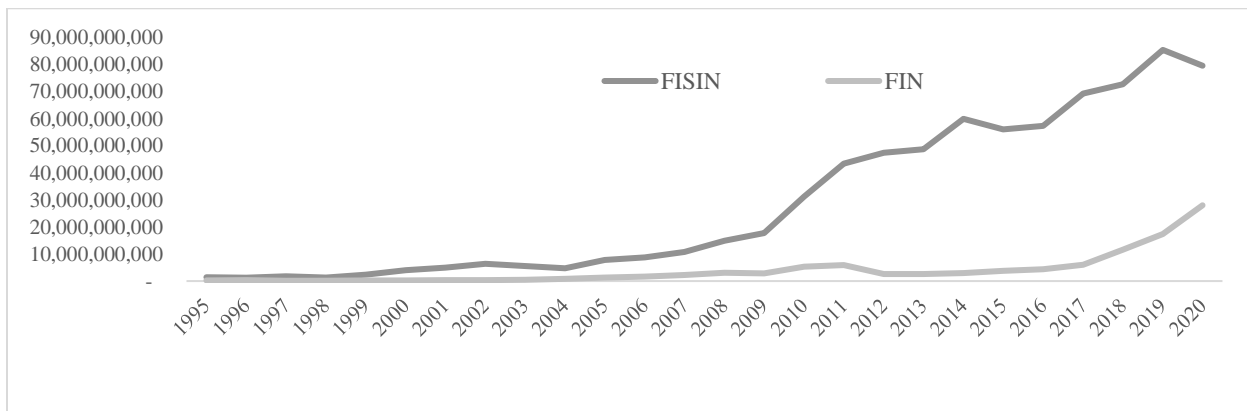


Figure 4: Trend of Fiscal and Financial Incentives

Author's computation (Source ECC, 2020 and NBE, 2020)

4.1.3 Export and Fiscal Incentives

As one can observe from the table below, export and fiscal incentives tend to have similar growth patterns. The amount of foregone tax revenue from incentives provided in the form of customs duty exemption is by and large in equivalence with the earnings from export. Such pattern is expected to raise a question in the effectiveness of the incentives provided.

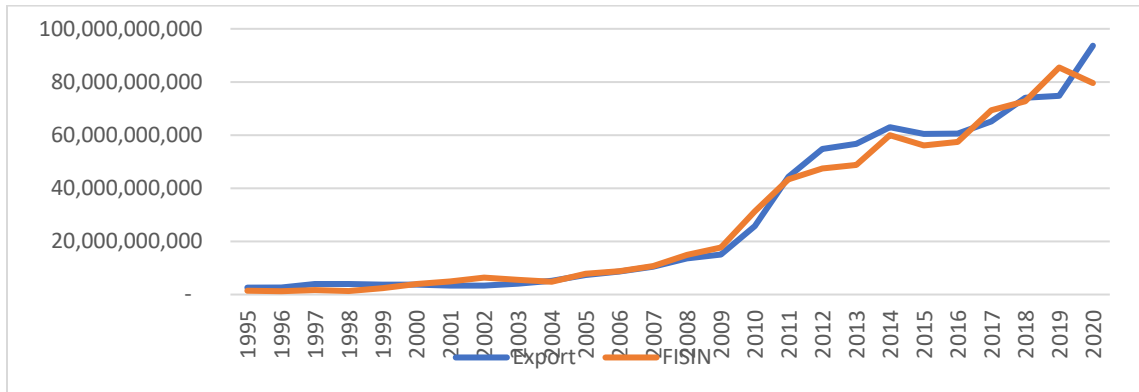


Figure 5: Trends in Export and Fiscal Incentives

Author's computation (Source ECC, 2020 and NBE, 2020)

4.1.4 Export and Financial Incentives

The export and export credit had been showing a similar growth pattern until the year 2009. The growth of export took a shooting rise from the year 2010. The sudden spike observed in 2010, aligns with the launching of the first Growth and Transformation Plan (GTP). Meanwhile, the amount of credit extended to exporters has been showing a steady pattern in the past 20 plus years. Nonetheless, starting from the year 2017, it is showing an increasing trend.

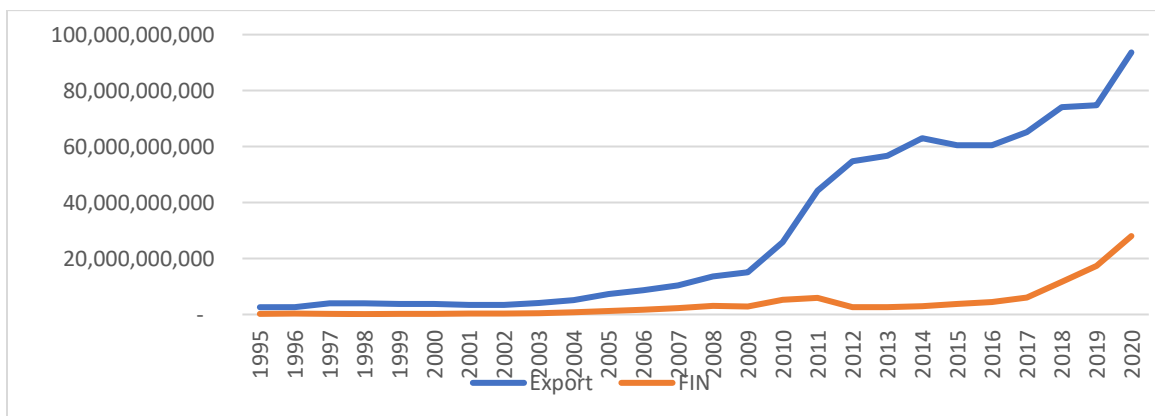


Figure 6: Trends in Export and Financial Incentives

Author's computation (Source NBE, 2020 and WBG database)

4.1.5 Real GDP

Ethiopia's economy witnessed broad-based double digit economic growth from 2010/11 to 2019/20. The growth was slow down last year following the outbreak of COVID-19, real gross domestic product (GDP) growth dropping to 6.1 %. Most of the growth in the economy is explained by the growth industry, particularly construction and service. During the pandemic period, the agriculture sector was the least affected, experiencing a slight increase in performance in 2019/2020 compared of previous year. The persistence increases in economic growth both in rural and urban areas resulted in positive trends in poverty reduction. The Government of Ethiopia has launched a 10-years perspective plan covering the period from 2020/21 to 2029/30. The plan attempts to maintain the impressive economic growth achieved during GTP while focusing more on private sector development, sectoral and structural reform and macro-economic stability. Developing the export sector is one of the key priority objectives outlined in the ten years prospective plan (PDC, 2020).

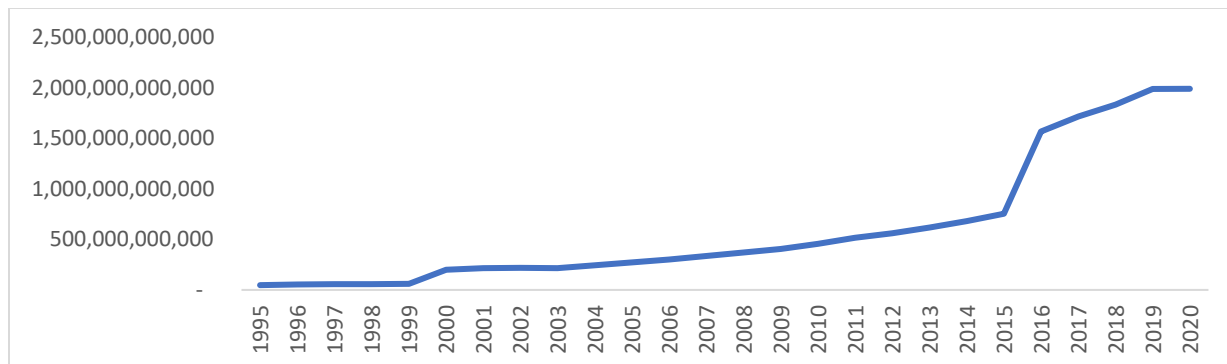


Figure 7: Trend of Real GDP

Author's computation (Source NBE, 2020 and WBG database)

4.1.7 Inflation

Even though Ethiopia experienced fast-paced economic growth in the past two decades, the country witnessed double-digit inflation throughout the growth period. As illustrated in the table below, after 2004, inflation has accelerated from single digit to double digits. Until 2004, the average official inflation record was 2.5% and following the jump it grew by 15.1%. The rise in inflation could potentially be explained by increase in direct advance to stimulate growth, accompanied by global financial crises from 2007-2009 (Abebe, 2019). Inflation has been exerting

adverse effects on growth and export, considerable contributing to the overall macroeconomic imbalance the county has been facing (Hagos, 2014).

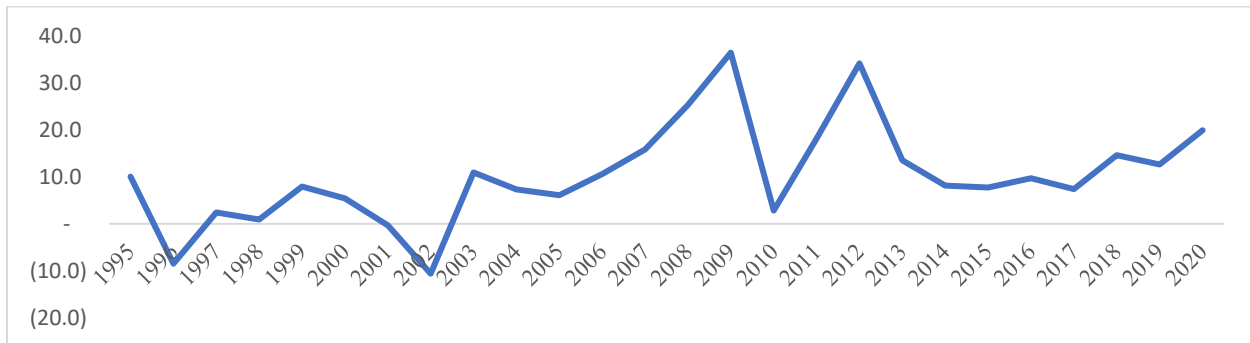


Figure 8: Trend of Inflation

Author's computation (Source NBE, 2020 and WBG database)

4.1.8 Foreign Direct Investment

The Ethiopian government made (still is) making a relentless effort to attract FDI, with the aim of boosting export performance and employment creation. As can be observed from the table below, similar to other variables, FDI has been experiencing a rapid growth starting from the year 2010. FDI considerably contributes to export, particularly to the growth manufacturing and Agro-processing export in the past ten years (Abebe, 2019). Despite the efforts made to attract foreign direct investment, starting from 2014 the inflow of FDI has been continuously decreasing. This is concerning taking into account the impact it has on real sector development, the inflow of foreign currency, and job creation. Several factors are cited as factors contributing to the poor FDI performance, including currency convertibility concerns, political uncertainty, delays in the privatization process of state-owned enterprises, and most recently the COVID pandemic which had significantly affected promotional activities planned to be carried out (EIC, 2020).

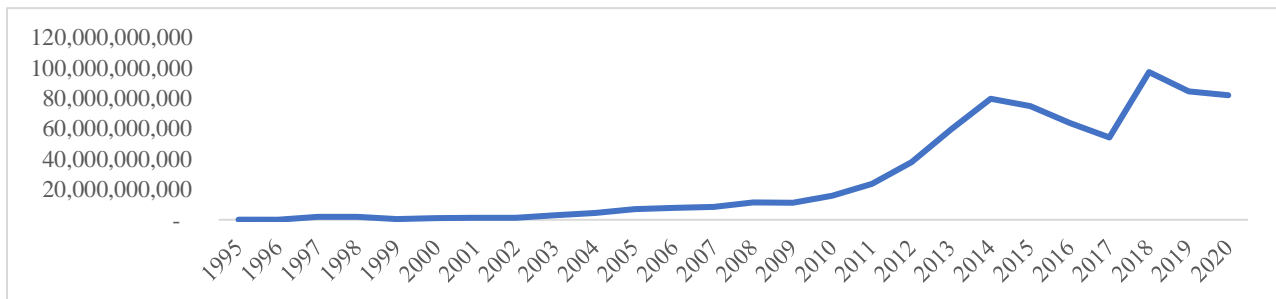


Figure 9: Trend of FDI

Author's computation (Source NBE, 2020 and WBG database)

4.1.9 Export and FDI

As can be observed in the figure below, until 2013, export and FDI had a similar growth pattern, with export showing a slightly better performance. Beginning from 2014, the inflow of FDI has been showing a volatile pattern compared to export, while export has demonstrated steady growth. The volatility in FDI had adversely affected the performance of export. Particularly earnings from manufacturing export, which highly depends on foreign investors engaged in the light manufacturing industries.

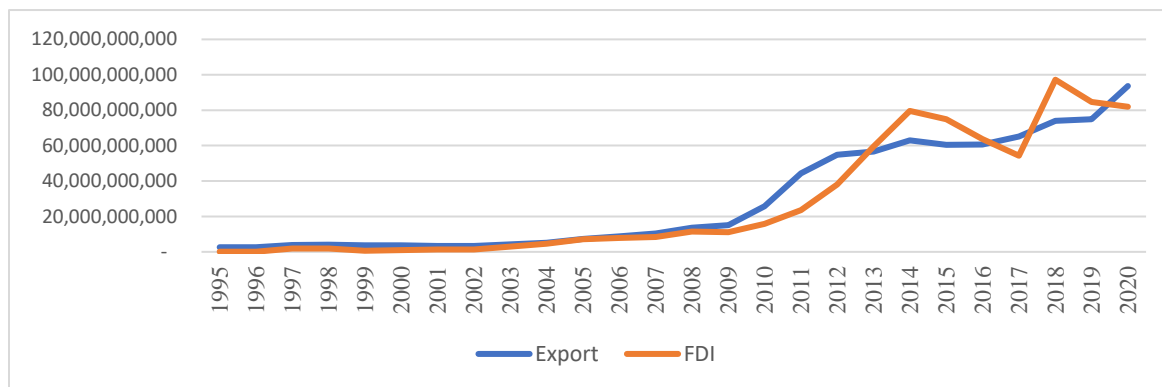


Figure 10: Trends in Export and FDI

Author's computation (Source NBE, 2020 and WBG database)

4.2 Descriptive Analysis of the data

Prior to engaging in any regression analysis, it is essential to describe the nature of variables understudied. In the table below (Table 4) the descriptive statistics of both the dependent and independent variables included in the model are summarized.

Table 3: Descriptive Statistics

	LNEXP	LNFIN	LNFIN	LNGDP	INF	LNFDI
Mean	23.45596	23.30165	21.15858	26.56071	10.3	22.80963
Median	23.34338	23.26088	21.59690	26.59017	8.9	22.99471
Maximum	25.26274	25.17117	24.05611	28.31916	36.4	25.30015
Minimum	21.68073	20.94541	18.75059	24.57760	-10.6	18.28232
Std. Dev.	1.285818	1.450342	1.505637	1.162364	10.7	2.042448
Skewness	0.042281	-0.216459	0.021708	-0.178797	0.6	-0.547783
Kurtosis	1.334754	1.644724	1.943657	2.211226	3.7	2.388140
Jarque-Bera	3.011876	2.192872	1.210892	0.812541	2.0	1.705856
Probability	0.221809	0.334060	0.545831	0.666130	0.4	0.426165
Sum	609.8551	605.8430	550.1232	690.5785	268.2	593.0505
Sum Sq. Dev.	41.33317	52.58729	56.67356	33.77723	2876.2	104.2898
Observations	26	26	26	26	26	26

Source: Author's compilation

The study covers 26 years observation period from 1995 to 2020. One dependent, variable export volume (LNEXP) and five independent variables (Fiscal incentive, Financial Incentive, Real GDP, Inflation and Foreign Direct Investment) are presented in their ln form in the descriptive summary. As can be observed from the above table, all the variables in study have a positive mean value. A variability from the mean is measured by standard deviation. The findings from the descriptive summary indicates that inflation (INF) has the highest variability (10.7), while real gross domestic product (LNGDP) has the lowest variability of 1.16. Inflation had also exhibited a considerable rate of variation between the maximum (36.4) and minimum (-10.6) value.

4.3 Econometric Analysis

4.3.1 Unit root test based on Augmented Dickey-Fuller (ADF) test

While carrying out the econometric analysis, the first step is performing the unit root test. A major problem in carrying out a time series data is a non-stationarity of variables, which produce inefficient and erratic results, notably the presence of spurious regression. As a result, the stationarity of each variable is investigated in order to identify the degree to which they are integrated using the Augmented Dickey–Fuller (ADF) test. As can be seen from the table below, all both the dependent and independent variables are non-stationary at level I (0). On the other hand, it can be observed that all the variables are stationary at level I (1). Shrestha & Bhatta (2018) indicated that the ADRL models can be applied if all the variables are integrated of order one.

Table 4: Augmented Dickey-Fuller (ADF) test

level I(0)					1 st difference I (1)			
Variable		Test statistics	Critical Value	Prob		Test statistics	Critical Value	Prob
lnExp	1% level	-3.72407	-0.177	0.9295	1% level	-3.737853	-3.932681	0.0064
	5% level	-2.986225			5% level	-2.991878		
	10% level	-2.632604			10% level	-2.635542		
lnFISIN	1% level	-3.72407	-0.952	0.754	1% level	-3.737853	-5.122941	0.0004
	5% level	-2.986225			5% level	-2.991878		
	10% level	-2.632604	0.451	0.9812	10% level	-2.635542		
lnFIN	1% level	-3.72407			1% level	-3.737853	-4.012557	0.0053
	5% level	-2.986225			5% level	-2.991878		
	10% level	-2.632604			10% level	-2.635542		
lnGDP	1% level	-3.72407	-0.859	0.7842	1% level	-3.737853	-4.920272	0.0006
	5% level	-2.986225			5% level	-2.991878		
	10% level	-2.632604			10% level	-2.635542		
INF	1% level	-3.72407	-3.178	0.0335	1% level	-3.752946	-6.011159	0.0001
	5% level	-2.986225			5% level	-2.998064		
	10% level	-2.632604			10% level	-2.638752		
lnFDI	1% level	-3.72407	-2.167	0.2224	1% level	-3.737853	-4.72565	0.001
	5% level	-2.986225			5% level	-2.991878		
	10% level	-2.632604			10% level	-2.635542		

Source: Author's compilation

4.3.2 Optimal Lag Selection

Once the stationarity of the data under study is confirmed, selecting the optimal lag length is the second step. While selecting lags caution must be taken as adding too many or too few lags to the model has its own drawbacks. Too many lags inflate the standard errors of coefficient estimates, implying a rise in forecast error, whereas too little lags might lead to estimation bias. As a result, it's important to include optimal number of lag length in the model. Minimizing information criteria mainly the Schwarz Criterion (SC), the Akaike Information Criterion (AIC), Predictor Error (FPE) and Hannan-Quinn information criterion (HQIC) and Predictor Error (FPE) are applied to select optimal length lags (Ng & Perron, 2001). In all of the information criterion the optimal maximum length selected is two.

Table 5: Optimal Lag Selection

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-159.5287	NA	0.039442	13.79406	14.08857	13.87219
1	-49.45998	155.9306	9.13E-05	7.621665	9.68326	8.168607
2	12.32751	56.63854*	7.09e-05*	5.472707*	9.301382*	6.488456*

* Indicates the optimal length under each criterion

Source: Author's compilation

4.3.3 ADRL Bound-Cointegration Test

After identifying the optimal lag length, it is necessary to conduct the bound test for integration. The bound test of co-integration relies on the premises that all of the variables in the study are either I (0) or I (1), and ensure that they are not integrated of I (2) so as to minimize spurious results.

Hypothesis

Null Hypothesis H0: $\theta_1 = \theta_2 = \theta_3 = \theta_4 = \theta_5 = \theta_6 = 0$

Alternative Hypothesis H1: $\theta_1 \neq \theta_2 \neq \theta_3 \neq \theta_4 \neq \theta_5 \neq \theta_6 \neq 0$

Table 6: Bound-Cointegration Test

F-statistic	Level of Significance	Lower bound I(0)	Upper bound I(1)
4.609205	10%	2.45	3.52
	5%	2.86	4.01
	2.5%	3.25	4.49
	1%	3.74	5.06

Source: Author's compilation

One can establish the long run association of the series if it is possible to reject the null hypothesis (H0), which specifies that there is no co-integration against the alternative hypothesis (H1) delineating that there is co-integration. According to Jordan & Philips (2018) the result of the F-statistic values must exceed the critical values in order to reject the null hypothesis. As can be observed from the above table, the F-statistics value of the bound test 4.61 confirms that there is co-integration or long-run relationship among the variables as the null hypothesis is rejected at 10%, 5% and 2.5%.

4.3.4 Long run estimation result (VECM model)

As can be observed from the table below, the error correction model coefficient (cointeq(-1)) estimated at -0.37 is highly statistically significant and has the correct sign indicating a fairly high speed of convergence to equilibrium. The coefficient -0.37 shows that 36.4% of the past deviations corrected every year.

Financial incentive (accesses to credit at a preferential rate) have significant and positive relationship with export volume in the long-run. Keeping other things constant, a 1% increase in export credit results in 0.63% increase in export volume. Putting in place additional financial incentive can further support export activities. A key point highlighted on an interview with a high-level expert from NBE is the implementation of the financial and accreditation system for successful exporters, which was enacted in the year 2006. Furthermore, provision of special incentives for exporters of non-traditional products and new products is a key recommendation suggested. On a related note, the streamlining of the services of DBE was outlined as a critical reform area to make the existing financial incentives competitive. Development Bank of Ethiopia interest and credit incentives for investors are no different from the incentives offered to other sectors. Credit incentives for exporters do not consider deemed exporters, here a suggested intervention is revised preferential interest rate for those engaged in export activities.

While fiscal incentive (custom duty exemption) has a significant and positive relationship with export volume (own's period) in the short run, in the long run, it becomes statistically insignificant.

On an interview with a high-level expert from ECC, a couple of points were intimated to illustrate the challenges related to fiscal tax incentives. Lack of standardized National Input Output Coefficient System, with only 2 sectors having an up-to-date ratio; has made it complex and length

to implement the incentive schemes. In addition, lack of up-to-date accounting system and gaps in information about export incentives has hindered the efficiency of the process. On a related note, it was alluded that the excessive penalties for misuse of tax returns as well as vouchers have prevented exporters from using the system.

Implementing specialized incentives in the manufacturing sector that are prone to using local materials is another area of focus outlined in the interview. Using domestic raw materials reduces production costs and makes products more competitive in the market, as such, a lack of incentives forces producers to consume more imported raw materials. This directly increases the price of the product and makes it less competitive in the global market.

Although the study used custom duty exemption as a proxy to measure the effectiveness of fiscal incentives, a number of suggestions were insinuated in the interview concerning tax holidays. For instance, enacting income tax incentives for companies engaged in R&D was an issue that was proposed. Research and development are critical to produce and supply competitive products in the global market by increasing productivity. Thus, specialized incentives are needed to encourage companies to engage in such work. When we look at the experience of other countries, special tax incentives are given to organizations engaged in research and development (R&D). In Malaysia, for example, these companies receive a 5–10-year income tax deduction.

Furthermore, additional incentives are recommended to further introduce incentives that can encourage export trade after the end of the tax relief period, which could include tax reduction and accelerated depreciation. Incentivizing domestic workers engaged in export sector is another proposed initiative during the interview. In the industrial zone, personal income is only exempted from taxation for foreign nationals. As this might be a disincentivizing factor for domestic workers in the sector, interventions must be in place to balance such variations. Apart from that, a critical issue raised during an interview with high level expert from MoTI was lack of minimum wage for workers in the industrial zone. Low wages and low benefits for workers in Ethiopia's industrial parks make it difficult for workers to stay in a factory for long periods of time. This also has negative implications on increasing productivity in industrial parks. Currently, Ethiopia has an 84

percent turnover rate in its industrial parks compared to only a 10 percent turnover rate in Bangladesh.

Additional suggestions on comprehensive value chain development programs were forwarded from the interview. Here, actions that can help to incentivize actors at the bottom of the export supply chain are proposed to ease the challenges faced in relation to the shortage of supply and raw materials.

All the interviewees emphasized the need for institutional setup, mandated to support, coordinate, and monitor export and export-related activities. At current, National Export Coordinating Committee, headed by the Prime Minister Office, has been formed but has not been effective as expected. Lack of an independent export coordinating institution has made it difficult to develop expertise in the sector and identify market opportunities for export.

GDP and FDI has significant and positive relationship with export volume. Keeping other things constant, a 1% increase in GDP results in 0.52% increase in export and a 1% increase FDI results in 0.30% increase in FDI. Inflation has a significant and negative relationship with export volume, similar to the short run.

Table 7: Long-run VECM model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CointEq (-1)	-0.363516	0.091154	-3.987921	0.0011
LNFIN	0.379351	0.267646	1.417362	0.1756
LNFDI	0.627717***	0.19111	3.284588	0.0047
INF	-0.016882**	0.007837	-2.154207	0.0468
LNGDP	0.303505**	0.120373	2.521372	0.0227
C	8.750913	2.326962	3.760661	0.0017

***implies significant at 1% significance level; **significant at 5% significance level

Source: Author's compilation

$$\ln EXP = 8.75C + 0.3794LNFDI + 0.6277LNFIN + 0.5239LNGDP - 0.0169INF + 0.3035LNFDI$$

4.3.5 Short run ADRL model

The below table demonstrates the short-run relationship of the series. The lagged value of export (one-period lag) itself a significant (1%) and positive effect on the volume of export. Fiscal incentives are significant on export at 1% own period. However, the relationship becomes insignificant at one lagged value. There is a significant (5%) and positive relationship between export and export credit at lagged value of one, while there is no short-term effect on own's period. In the short run, GDP and FDI has significant and positive relationship with the volume of export in own's period. However, Inflation has significant and negative relationship with export volume.

Table 8: Short run ADRL model

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNEXP (-1)	0.636484***	0.091154	6.982494	0.0000
LNFINISIN	0.331543***	0.103667	3.19816	0.0056
LNFINISIN (-1)	-0.19364	0.119301	-1.62314	0.1241
LNFIN	0.024592	0.067383	0.364963	0.7199
LNFIN (-1)	0.203593**	0.080219	2.53797	0.0219
LNFDI	0.110329**	0.03999	2.758893	0.014
INF	-0.00614**	0.002624	-2.33874	0.0327
LNGDP	0.19045**	0.081115	2.34791	0.0321
C	3.181097	1.030626	3.086566	0.0071

***implies significant at 1% significance level; **significant at 5% significance level

Source: Author's compilation

$$LNEXP = 3.181C + 0.3315LNFINISIN + 0.2036LNFIN + 0.1905LNGDP - 0.0061INF + 0.1103LNFDI$$

4.3.6 Pairwise Granger Causality Tests

The table below demonstrates the direction of causality between the variables understudied. Here the decision criteria infer that the null hypothesis is rejected if the p-value is greater than 0.05. As it can be observed from the table, export credit and inflation granger cause with export earnings as the null hypothesis is rejected. Meaning, an increase in the amount of export credit availed to exporters causes export earnings to grow. Concurrently, an increase in inflation causes a decrease in export. However, it must be noted that the vice-versal doesn't hold to be true, as export doesn't granger cause neither with export credit nor inflation. FDI doesn't granger cause with export earnings, nevertheless, export granger cause with FDI. This is an intriguing finding which can provoke a research question. The rest of the variables, fiscal incentives, and GDP shows there is no granger causality with export as the rejection criteria were not proven otherwise.

Table 9: Pairwise Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.
LNFIINC does not Granger Cause LNEEXPORT	24	0.79579	0.4657
LNEEXPORT does not Granger Cause LNFIINC		1.79014	0.194
LNCREDIT does not Granger Cause LNEEXPORT	24	8.41338	0.0024
LNEEXPORT does not Granger Cause LNCREDIT		0.30241	0.7425
LNGDP does not Granger Cause LNEEXPORT	24	1.07535	0.3611
LNEEXPORT does not Granger Cause LNGDP		2.34429	0.123
INFLATION does not Granger Cause LNEEXPORT	24	3.79087	0.0412
LNEEXPORT does not Granger Cause INFLATION		2.74113	0.09
LNFDI does not Granger Cause LNEEXPORT	24	0.18869	0.8296
LNEEXPORT does not Granger Cause LNFDI		6.77358	0.006
LNCREDIT does not Granger Cause LNFIINC	24	2.14188	0.1449
LNFIINC does not Granger Cause LNCREDIT		1.31331	0.2923
LNGDP does not Granger Cause LNFIINC	24	0.11691	0.8903
LNFIINC does not Granger Cause LNGDP		1.38636	0.2741
INFLATION does not Granger Cause LNFIINC	24	6.98722	0.0053
LNFIINC does not Granger Cause INFLATION		1.33482	0.2868
LNFDI does not Granger Cause LNFIINC	24	6.21908	0.0084
LNFIINC does not Granger Cause LNFDI		12.9622	0.0003
LNGDP does not Granger Cause LNCREDIT	24	4.92128	0.019
LNCREDIT does not Granger Cause LNGDP		1.12832	0.3443
INFLATION does not Granger Cause LNCREDIT	24	0.21319	0.8099
LNCREDIT does not Granger Cause INFLATION		3.22382	0.0623
LNFDI does not Granger Cause LNCREDIT	24	3.97683	0.0361
LNCREDIT does not Granger Cause LNFDI		7.33836	0.0044
INFLATION does not Granger Cause LNGDP	24	0.14206	0.8685
LNGDP does not Granger Cause INFLATION		1.21686	0.3182
LNFDI does not Granger Cause LNGDP	24	8.38338	0.0025
LNGDP does not Granger Cause LNFDI		2.98815	0.0744
LNFDI does not Granger Cause INFLATION	24	0.95747	0.4016
INFLATION does not Granger Cause LNFDI		0.99348	0.3887

Source: Author's compilation

4.3.7 Normality Test

Graphical methods, such as normality plots and histograms, can be used to evaluate the normality assumptions and give a visual evaluation of the normal distribution of a data set before engaging in the interpretation of the regression analysis. The histogram provides essential details about a distribution's shape. A normal distribution arises when the majority of the scores cluster around the middle of the continuum and there is a progressive, symmetric decline in frequency on each

side of the center. On the other hand, skewed scores are not symmetric and are spread away from the majority score. In scenarios where the tail is positively skewed a small portion of the distribution is stretched out to the right. Concomitantly, the distribution is negatively skewed if the tail is stretched out to the left. If the shape of the distributions has no peaks it is referred to as Kurtosis. When kurtosis is 3 and skewness is 0, the distribution is considered normal (Mishra,P et al., 2019).

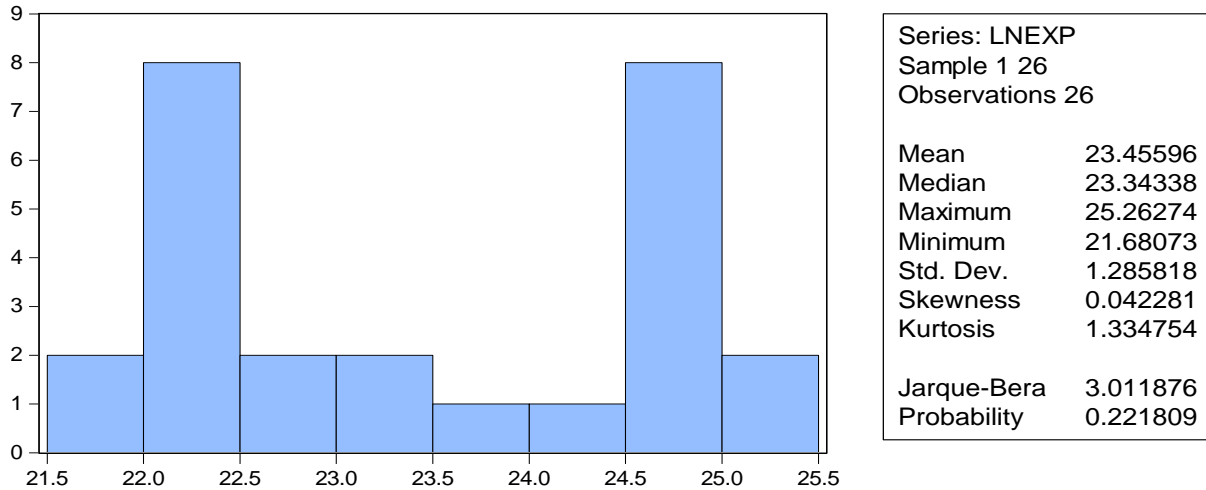


Figure 11: Normality Test

Source: Author’s compilation

Hypothesis

- The null hypothesis H0: The residuals in the data are normally distributed
- The alternative hypothesis H1: The residuals in the data are not normally distributed

As one can observe from the above figure, the skewness value is around 0.423, which approximate to 0. The Jarque-Bera’s shows that residuals are normally distributed as the probability value is 0.222, which is greater than 0.05. To fail to reject the null hypothesis, the p-value presented at the bottom of the normality test screen must be greater than 5%.

4.3.8 Heteroskedasticity tests

The heteroskedasticity test is a test of the OLS estimator assumption that specifies the variance of errors term is constant and that residuals do not differ across observations. The research used the Breusch Godfrey test to check for heteroskedasticity (BG test) (Li & Yao, 2019).

Table 10: The Heteroskedasticity test of the multiple regressions

F-statistic	1.116292	Prob. F (8,16)	0.403
Obs*R-squared	8.955288	Prob. Chi-Square (8)	0.3461
Scaled explained SS	2.742152	Prob. Chi-Square (8)	0.9495

Source: Author's compilation

Hypothesis

- The null hypothesis H0: There is homoscedasticity
- The alternative hypothesis H1: There is no homoscedasticity (the existence of Heteroskedasticity).

As can be observed from table 7 above, the p-values both for F-statistics and Chi-square version of the test statistics are above 0.05. Therefore, there is no evidence that shows the existence of heteroskedasticity. In the same manner, the explained sum of squares from the auxiliary regression, presents that there is no evidence for the occurrence of a heteroskedasticity problem. Hence, since all the three forms of heteroskedasticity tests fail to reject the null hypothesis of homoscedasticity the variance of the error term is constant or the CLRM assumption is not broken.

4.3.9 Autocorrelation Test

The study used the Breusch-Godfrey test to test for autocorrelation. The Breusch-Godfrey test enables to detect autocorrelation that were captured by the Durbin-Watson test (the first order autocorrelation test). The BG test has additional advantage as it tests the autocorrelation of the residual and several lagged values (Islam & Toor, 2019).

Table 11: Autocorrelation Test

F-statistic	0.406329	Prob. F(1,15)	0.5334
Obs*R-squared	0.659354	Prob. Chi-Square (1)	0.4168

Source: Author's compilation

Hypothesis

The null hypothesis H0: There is no autocorrelation

The alternative hypothesis H1: There is autocorrelation

The DW test (d-statistics) fall between the range 0 to 4. If no autocorrelation is detected, d is expected to be 2. Based on finding of the study the DW statistics value is 2.10 which is approximate

to 2. Therefore, it is possible to conclude that autocorrelation doesn't exist. Furthermore, the BG tests of the residuals and lagged value (at lag 1) indicates the absence of autocorrelation. The null hypothesis that implied that there is no autocorrelation is not rejected as the p-values of 0.5334 and 0.4168 (the F-statistic and Obs*-squared respectively) are higher than 0.05.

4.3.10 Multicollinearity test

Table 12: Multicollinearity test

Variable	VIF	1/VIF
LNFISIN	3.82	0.27785
LNFIN	3.61	0.32267
LNGDP	2.25	0.36019
LNFDI	4.17	0.74689
INF	1.82	0.47489
Mean VIF	2.37	

Source: Author's compilation

The tests of multicollinearity refer to the notion that the independent variables should not be correlated with one another. One approach to measure multicollinearity is VIF (variance inflation factor), which examines how much the variance of an estimated regression coefficient rises if the predictors are correlated. A VIF of 5 to 10 suggests a significant degree of association, which could be problematic. The above table (10) indicates that multicollinearity is not a serious problem.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

6.1 Conclusion

The ultimate objective of this study is to empirically analyze the effects of fiscal and financial incentive of national export performance from the period 1995 to 2020. Both descriptive and econometric analysis was carried out to comprehend the trends and causal relationship among the variables understudied. The descriptive analysis carried out demonstrated the patters of the both the dependent and independent variables during the past 26 years. Most of the independent variables has witnessed a spiking upward growth starting from the year 2010. This aliens with the launching of the first Growth and Transformation Plan (GTP), an era where the government embarked on aggressive developmental approach. Even though the study found export credit to be essential to the performance of export, it has shown steady growth pattern since the year 2016. In the past four years of the study period, it has started to peak up. Inflation has been exerting adverse effects on growth and export, considerable contributing to the overall macroeconomic imbalance the county has been facing.

Concerning econometric analysis, the study adopted the ADRL model to cointegration to analyze the short-run and long-run relationship between custom duty exemption and export credit on export performance. The bound test of the study revealed that there is a long-run relationship between export credit and export volume. Keeping other things constant, a 1% increase in export credit results in a 0.63% increase in export volume. On the other hand, while fiscal incentive (custom duty exemption) has a significant and positive relationship with export volume in the short run, in the long run, it becomes statistically insignificant. The error correction term estimated in the research using the ADRL model was found to be negative and significant as predicted.

Matching to literature, both GDP and FDI have significant and positive relationship with export volume in the short-run and in the long-run. Correspondingly, inflation has significant, yet negative relationship with export performance. The reviews undertaken on the experience of other countries indicates that initiatives must be taken to improvises the existing fiscal and financial incentives. Furthermore, additional efforts must be made to introduce new policy incentives to make the export sector more attractive.

6.2 Recommendation

Export incentive schemes plays crucial role in encouraging the export sector. However, a continuous assessment has to be carried out to evaluate whether they are serving the purpose they intend to serve in the short and long run period. Based on the findings of the study the following recommendations are suggested to improve the effectiveness of fiscal and financial incentives.

- As the result of the study indicate, export credits have positive effects on export performance both in the short and long-run, despite the steady pattern observed. Hence, additional initiatives must be taken to improve credit, interest rate policies. Implementing the financial accreditation system, which was ratified in the year 2006 and providing special financial incentives for non-traditional exporters and those that reached out to new export markets are areas the government can make adjustments. In addition, synthesizing the various interest and credit incentives provided by Development Bank of Ethiopia can assist to make its service more efficient and effective.
- Absence of long-run relationship between custom duty exemption and export performance might imply incentives provided in the form of custom duty exemption are more assisting the first years of the business. On the other hand, it might be implying that the methods used to implement them must be revised. For instance, revising the national input output coefficient system, streamlining the outdated accounting systems and information systems, introducing specialized incentives for manufacturers which use local raw materials and introducing specialized income tax incentives for companies engaged in research and development might make fiscal incentives more effective in the long-term.
- In addition, introducing new policy incentives like launching of national export trade strategy and establishing Export Promotion Agency can contribute to the sustainable growth of export sector. At current, a National Export Coordinating Committee has been formed but has not been as effective as expected as gaps are being observed in the consistency and continuity of the coordinating process.

Reference

- Action Aid. (2016). Still racing toward the bottom? Corporate Tax Incentives in East Africa, Action Aid Publication.
- Ahmad, A., & Adinew, M. (2018). Evaluating the impact of export promotion policy incentives in the Ethiopian manufacturing sector. 1–42.
- Ahmad, I. (2015). The Value of Export Incentives. *The Lahore Journal of Economics*.
- Ahmad, S., Sallehuddin, M. R., Zakaria, N., & A. b. (2017). The Effect of Export Incentives to Export Activities in Malaysia. *International Journal of Economic Research*.
- Akanbi, O, et al. (2020). IMF Country Report – Sudan, No. 20/73; 2020.
- Akara, J. (1989). The Impact of Trade Incentives on Exports, Balance of Payments and Economic Growth. *Journal of the University of Nairobi*, 35-55.
- Alexander. (1952). Effects of a Devaluation on a Trade Balance. *Springer*, 263-278.
- ALN (2017), Investment Guide 2015: Mauritius, Africa Legal Network Publication
- Amendment of Retention and Utilization of Export Earnings Directives No. 67/2020 (testimony of FDRE).*
- Amendment of Retention and Utilization of Export Earnings and Inward Remittance Directives No.48/2017 (testimony of FDRE).*
- Archiv, W. (2017). Export Incentives and Export Performance in Developing Countries : A Comparative Analysis Author (s): Bela Balassa Published by : Springer Stable URL : <http://www.jstor.org/stable/40438317> Export Incentives and Export Performance in Developing Countries. 1(1978), 24–61.
- Balassa, B. (1984). “Adjustment policies and development strategies in sub-Saharan Africa.”: *Economic Strategy and Performance, Essays in Honor y/ Hollis B. Chenery* (New York: Academic Press. 1984). pp. 3 17-340
- Balassa, B. (1978). Export Incentives and Export Performance in Developing Countries: A Comparative. *Springer*, pp. 24-61.
- Balassa, B. (1990). Incentive policies and export performance in sub-Saharan Africa. *World Development*, 18(3), 383–391. [https://doi.org/10.1016/0305-750X\(90\)90125-H](https://doi.org/10.1016/0305-750X(90)90125-H)
- Baldwin, R. (2008). The Development and Testing of Heckscher-Ohlin Trade Models: *A Review . ResearchGate*.
- Basarir, C., & Sarihan, A. (2018). The Effect of Investment Incentives and Export Credits on Country Export: The Case of Turkey. *ResearchGate*.
- Belloc, M., & Di Maio, M. (2012). Survey of the Literature on Successful Strategies and Practices for Export Promotion by Developing Countries. In *SSRN Electronic Journal* (Issue June). <https://doi.org/10.2139/ssrn.2001000>
- Blancheton, B., & Chorn, D. (2019). Export diversification, specialisation and inequality: Evidence from Asian and Western countries. *The Journal of International Trade & Economic Development*.
- Bloomfield, I. (1989). Aspects of the Theory of International Trade in France. *Oxford Journals*, 41 (3), 619-636.
- Brander, J., & Spencer, B. (1984). Export Subsidies and International Market Share Rivalry . *Journal of International Economics*.
- Brue, C. R. (2008) *Economics*. 17th edition. McGraw-Hill.
- Bricki, N. and Green, J. (2007) *A guide to using qualitative research methodology*. London, London School of Hygiene and Tropical Medicine.

- Caglayan-Akay, E., & Oskonbaeva, Z. (2018). Empirical Analysis of the Linder Hypothesis: A Random Effects Tobit Model. *The Empirical Economics Letters*.
- Charles, L. (2000). On The Wealth of Nations: Contemporary Responses to Adam Smith, and: On Moral Sentiments: Contemporary Responses to Adam Smith (review). *Spring*, p166.
- Chowdhury, M. (2019). Tax Incentives and Industrial Development in Bangladesh: An Evaluation Of Policy Impact On Sectoral Growth, *International Journal of Research - Granthaalayah*, 7(7), 321-330.
- Claro, S. (2009). FDI Liberalization as a Source of Comparative Advantage in China. *Review of Development Economics* , 13 (4), 740-753.
- Collins, J. (2017). An Analysis of Adam Smith's The Wealth of Nations. *Macat Library*.
- Cunat, A., & Melitz, M.C. (2012). Volatility, Labour Market Flexibility, and the Pattern of Comparative Advantage. *Journal of the European Economic Association* , 10 (2), 225-254.
- Dana, L. P., Grimwood, S., & William, G. (2009). Export incentives and international entrepreneurship in New Zealand firms. *J. for International Business and Entrepreneurship Development*, 4(1/2), 1. <https://doi.org/10.1504/jibed.2009.022526>
- Debel, G. (2002). Exports and economic growth in Ethiopia: An empirical investigation. Addis Ababa, Ethiopia.
- Dekker, E., Remic, B., & Dalla Chiesa, C. (2020). Incentives Matter, But What Do They Mean? Understanding the Meaning of Market Coordination. *Review of Political Economy*, 32(2), 163–179. <https://doi.org/10.1080/09538259.2019.1628341>
- Dickey, D., & Fuller, W. (1979). Distribution of the Estimators for Autoregressive Time Series with a Unit Root. *Journal of the American Statistical Association* , 427-431.
- Export Trade Duty Incentive Schemes Proclamation 768/2012, 6555 (2012) (testimony of FDRE)*.
- Efobi, U. R., Tanankem, V. B., & Beecroft, I. (2017). Incentives and firm productivity: Exploring multidimensional fiscal incentives in a developing country. *World Development Perspectives*, 5, 56–59. <https://doi.org/10.1016/j.wdp.2017.03.001>
- EIC. (2020). Annual Report, 2020. Addis Ababa: Ethiopian Investment Commission.
- Elias, M. (2016). Effect of Tax Incentive on Domestic Investment in Ethiopia: A Case Study in the Manufacturing Sector. Addis Ababa, Ethiopia.
- EY. (2020). *Investment in Vietnam: A Reference Guide*. Hanoi: Ernest and Young.
- Emako, E., (2020). Determinants of Export Performance in Ethiopia. Arba Minch University , Ethiopia.
- Engin, E., & Rüyü, A. (2012). Investment Incentives and FDI in Turkey: The Incentives Package after the 2008 Global Crisis, *Social and Behavioral Sciences*, 58: 1183 – 1192.
- Fanta, A., & Teshale, G. (2014). Export Trade Incentives and Export Growth Nexus: Evidence from Ethiopia. *British Journal of Economics, Management & Trade*, 4(1): 111-128, 2014.
- Fleming, M. (1962) Domestic Financial Policies under Fixed and under Floating Exchange Rates, *International Monetary Fund Staff Papers* 9
- Foreign Exchange Management Directive No. FXD/62/2019 (testimony of FDRE)*.
- Foreign Exchange Transaction in Industrial Parks Directive No. FXD/59/2019 (testimony of FDRE)*.
- Formaini, R. (2008). David Ricardo: Theory of Free International Trade. *Federal Reserve Bank of Dallas*.

- Galli, R. (2017). The Role of Investment Incentives for Structural Transformation: A Comparative Analysis of Investment Incentives Legislation in Developing Countries in Sub-Saharan Africa, South Asia and South-East Asia, ILO Working Paper, No. 211, 2017.
- Gatawa, N. M. M., Dantama, Y. U., Saniac, M. B., & Sani, M. B. (2017). Impact of export incentive schemes on the performance of agricultural exports in Nigeria. *Journal of Economics Bibliography*, 4(4), 328–334. www.kspjournals.org
- Gebreyesus, M., & Demile, A. (2017). Why export promotion efforts failed to deliver? Assessment of the export incentives and their implementation in Ethiopia. EDRI Working Paper 17.
- Gemechu, D. (2002). Exports and Economic Growth in Ethiopia: An Empirical Investigation . Addis Ababa, Ethiopia.
- Gemeda, A. (2020). Export Trade Incentive Schemes Nexus Export Performance in Ethiopia. *International Journal of African and Asian Studies*, 45-55.
- Getachew, E. (2019). The Impact of Export Financing Incentives by Commercial Banks on the Export Earning of Ethiopia: The Case for Export Credit. Addis Ababa, Ethiopia.
- Getahun, S. (2014). *The contribution of export earnings to economic growth of Ethiopia: a trend analysis*. 1–30.
- Hagos, T. (2014, May). Determinants of recent Inflation: The Case of Ethiopia. Retrieved from Mekelle University: <https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/5184/Determinants%20recent%20Inflation.pdf?sequence=1&isAllowed=y>
- Hailu, T. (2015, May). The Effect of Export Trade Tax Incentives on Export Growth: The Case of Ethiopia. Addis Ababa, Ethiopia.
- Harrison, A. and Clare A. Rodríguez (2009). Trade, Foreign Investment, and Industrial Policy for Developing Countries. NBER Working Papers, 15261.
- Herlitz, L. (2011). The concept of mercantilism. *Scandinavian Economic Review*.
- Hong, B. (2019). A Two-Round in-class trading game on the principle of comparative advantage and the theory of reciprocal demand. *International Review of Economics Education* , 30, 1-7.
- Hibbert, E. (1990). *Management of International Trade Promotion*; . London.
- Islam, T. U., & Toor, E. (2019). Power Comparison of Autocorrelation Tests in Dynamic Models. *ReserchGate*, 58-69.
- James, S. (2013). Effectiveness of Tax and Non-Tax Incentives and Investments: Evidence and Policy Implications, World Bank Group
- Johnson, R. (2000). *A Guide to Using EViews with Using Econometrics: A Practical Guide*. University of San Diego.
- Jordan, S., & Philips, A.Q. (2018). Cointegration Testing and Dynamic Simulations of Autoregressive Distributed Lag Models. *The Stata Journal* , 18 (4), 902-923.
- Kuma, A. (2002). *Manufacturing Sector and Trade Liberalization in Ethiopia*. Addis Ababa, Ethiopia.
- Larbi, W., & Chymes, A. (2010). The impact of the government policies and incentives to promote the export of agricultural products in Tunisia: The case of olive oil. *Food Economics - Acta Agriculturae Scandinavica, Section C*, 7(2–4), 107–118. <https://doi.org/10.1080/16507541.2010.531952>
- Leamer, E. (1995). The Heckscher-Ohlin Model in Theory and Practice. *Princeton Studies in International Finance*.

- Li, Z., & Yao, J. (2019). Testing for Heteroscedasticity in High-dimensional Regressions. ReserchGate, 122-139.
- Lloyd, P. (2011). The Discovery of The Heckscher–Ohlin Model of International Trade. *International Journal of Development and Conflict*.
- Majefd, M., & Ahmad, E. (2006). Determinants of Exports in Developing Countries. *The Pakistan Development Review*, 1265-1276.
- Medina-Smith, E. J. (2001). Is the Export Led Growth Hypothesis Valid for the Developing Countries? A Case Study for Costa Rica. Study Series Number 7, United Nations Conference on Trade and Development.
- MFEPD and MID. (2019). Handbook on Schemes & Incentives for MSMEs & Entrepreneurs, MFEPD Publication.
- Mishra, P., Pandey, C., Singh, U., & Gupta, A. (2019). Descriptive Statistics and Normality Tests for Statistical Data. ResearchGate, 67-72.
- Morrow, P. M. (2010). Richardian-Heckescher-Ohlin Comparative Advantage: Theory and Evidence. Retrieved from <https://www.economics.utoronto.ca>
- MoTI. (2020). *Annual Report: Export Performance* . Addis Ababa.
- Mundell, R. (1963). Capital Mobility and Stabilisation Policy under Fixed and Flexible Exchange Rates, *American Economic Review* 53, 112-119
- Murage, N. (2012, November 2012). The Effect of Tax Incentives on the Investments of Export Processing Zone Firms in Kenya. Nairobi, Kenya.
- Myint, H. (1958), "The Classical Theory of International Trade and the Under developed countries", *Economic Journal*, 68:317-37
- NBE. (2020). *Annual Report 2019-2020*. Addis Ababa: National Bank .
- Ng, S., & Perron, P. (2001). Lag Length Selection and the Construction of Unit Root test with Good Size and Power. *Econometrica* , 69 (6), 1591-1554.
- Nthiwa, M., (2019). Effect of Tax Incentives on Foreign Direct Investment In Kenya, *International Journal of Business Management & Finance*, 3(2): 51-64.
- Oqubay, A. (2018). The Structure and Performance of the Ethiopian Manufacturing Sector. Working Paper Series N° 299 .
- Oyejide, A. (n.d.). African Trade, Investment and Exchange Rate Regimes and Incentives for exporting. Retrieved January 20, 2012, from www.aercafrica.org.2007.
- Palley, T. I. (2011). The Rise and Fall of Export-led Growth. Working paper 675, Levy Economics Institute of Bard College.
- Panagariya, A. (2000). Evaluating the Case for Export Subsidies. World Bank Policy Research Working Paper, No. 2276
- PDC. (2020). Annual Growth and Development Report. Addis Ababa: Planning and Development Commisison .
- PSI. (2019). *Assessment on Export Incentives in Ethiopia* . Addis Ababa: Public Studies Institute.
- Regassa, E. (2008). Government Support and Export: A Did Approach. Addis Ababa, Ethiopia.
- Riedel, J., Hall, C., & Grawe, R. (1984). Determinants of indian export performance in the 1970s. *Review of World Economics (Weltwirtschaftliches Archiv)*, *Springe*, 40-63.
- Rodrik, D. (1995). Trade and industrial policy reform. In J. Behrman & T. N. Srinivasan (Eds.), *Handbook of development economics* (vol. 3B, pp. 2927–2964). Philadelphia, PA: Elsevier.
- Rugman, A., & Verbeke, A. (2005). Towards a Theory of Regional Multinationals: A Transaction Cost Economics Approach. *Springer*.

- Sak, G. (2015). An Investment Policy Framework for Turkey in The Twenty-First Century, The Economic Policy Research Foundation of Turkey.
- Sanjay, K., & Malouche, M. (2016). Toward New Sources of Competitiveness in Bangladesh: Key Findings of the Diagnostic Trade Integration Study. World Bank Group Publication.
- Santos-Paulino, A. (2017). Estimating the impact of trade specialization and trade policy on poverty in developing countries. *The Journal of International Trade & Economic Development*.
- Schumacher, R. (2012). Adam Amith's Theory of Absolute Advantage and the use of doxography in the History of Economics. *Erasmus Journal for Philosophy and Economics*, 5 (2), 54-80.
- Shahram, G., Mohammad, T., & Mona, K. (2013). Export Incentives and its Importance in the Export Performance. *Arabian Journal of Business and Management Review (Nigerian Chapter)* , Vol. 1, No. 11, 2013.
- Shrestha, M. B., & Bhatta, G. R. (2018). Selecting appropriate methodological framework for time series data analysis. *ResearchGate*, 1-19.
- Stonehouse, G., & Snowdon, B. (2007). Competitive Advantage Revisited: Michael Porter on Strategy and Competitiveness. *ResearchGate*.
- TJN. (2012). Tax Justice Network-Africa , Tax competition in East Africa, A Race to the bottom? Tax incentives and revenue losses in Kenya. Tax Justice Network Publication.
- Togan, S. (1993). How to assess the significance of export incentives: An application to turkey. *Weltwirtschaftliches Archiv*, 129(4), 777–800. <https://doi.org/10.1007/BF02707882>
- Tran, M. (2020). Export Performance and Soutlions for Promoting Export - Case Company: Y Corporation. Retrieved from <https://www.theseus.fi>
- Transfer Duties and Responsibilities Related to Establishment and Operation of Export Credit Guarantee Scheme from NBE to CBE Directive No. SBB/41/07 (testimony of FDRE).*
- Tsen, W. H. (2007). Exports, Domestic Demand and Economic Growth: Some Empirical Evidence of the Middle East Countries. *Journal of Economic Cooperation* , 28 (2), 57-82.
- Tuomi, K. (2012). Review of Investment Incentives: Best Practice in Attracting Investment, Working Paper, International Growth Center
- Tyler, W. (1981). Growth and Export Expansion in developing countries. *Journal of Development Economics*, 9(1), pp.121-130.
- Uddin, G. (2021). A critique of modern theories of trade. *Munich Personal RePEc Archive*.
- UNCTAD. (2004). Incentives. United Nations Conference on Trade and Development. New York: UNCTAD/ITE/IIT/2003/5.
- UNCTAD. (2013). Investment Policy Review of Djibouti, UNCTAD Publication.
- UNCTAD. (2015). Investment Policy Review of the Sudan, 2015, UNCTAD Publication.
- UNCTAD. (2020). Tax Incentives and Foreign Direct Investment a Global Survey, Geneva ASIT Advisory Studies No. 16.
- Van, H. (2019). The Effectiveness of Corporate Tax Incentives in Attracting Foreign Direct Investment: The Case of Vietnam, *Advances in Economics, Business and Management Research*, Volume 83, Atlantic Press.
- Vernon, R. (1966). International Investment and International Trade in the Product Cycle. *The Quarterly Journal of Economics*.

- Wolde. (2019, June). *Addis Ababa University Portal*. Retrieved from Addis Ababa University :file:///C:/Users/Mel/Documents/untitled%20folder%202/Export%20Incentives_LR%20-%20Copy/Tewodros%20Assefa.pdf
- World Bank Group (2019). 2019 Investment Policy and Regulatory Review: Turkey, World Bank Publication.
- World Bank Group. (2020). 2019 Investment Policy and Regulatory Review: Vietnam, World Bank Publication.
- Wijnbergen, S. (1986). The Welfare Effects of Trade and Capital Market Liberalization. *International Economic Review*.
- Yin, X., & Yin, X. (2005). Can developing countries benefit from export promotion? *Journal of Economic Studies*.
- Yishak, T. (2009, 01). Determinants of Ethiopian Export performance. Trade & Development Discussion paper.