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The Effect of Export Trade Tax Incentives on Export Growth: The Case of Ethiopia

Project work submitted to the Indira Gandhi National Open University in partial fulfillment of the requirements for the award of Degree-Master of Arts (Economics).I hereby declare that this work has been done by me and has not been submitted elsewhere.

Signature of the candidate:_____

Name of the Candidate: <u>Tewelde G/slassie Hailu</u>

Address: Addis Ababa, Ethiopia

May, 2015

CERTEFICATE

Certified that the project work entitled **"The Effect of Export Trade Tax Incentives on Export Growth: The Case of Ethiopia "**submitted by **Tewelde Gebreslassie** is his own work and has been done under my supervision.

It is recommended that this project be placed before the examiner for evaluation.

Signature of supervisor_____

Name **Dugassa Mulugeta (PhD)**

Address **dugassa_dr@yahoo.com**

Study center St marry university

Regional center Addis Ababa, Ethiopia

Date_____

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List of Acronyms

EEA	Ethiopian Economic Association
ETB	Ethiopian Birr
ERCA	Ethiopian Revenues and Customs Authority
FDI	Foreign Direct Investment
GDP	Gross Domestic product
GNP	Gross National Product
LDCs	Less Developed Countries
MOFED	Ministry of finance and Economic Development
NBE	National Bank of Ethiopia
WTO	World Trade Organization

1. Effects of Export Trade Tax Incentives on Export Growth

1.1 Introduction

Even though the debate over the outcomes of tax incentives is not settled, a number of countries use different investment incentives in general and export incentives in particular. Tax holidays, export credit, duty free import of raw materials are among the different incentives which are given by different governments. Regarding export policies reforms, the main instruments used to promote export growth and diversification have been adjustment to exchange rates and producer prices and tariff reforms to reduce the anti-export bias in the structure of import protection. In countries with extensive foreign exchange distortions (e.g. exchange controls and multiple exchange rates), foreign exchange retention schemes for exporters were sometimes introduced, and, in some cases, special licenses (to import inputs) and duty drawback schemes were provided to exporters. The export promotion schemes mentioned above have not effectively addressed the anti-export bias facing export industries in restrictive systems and have proved difficult to administer. Nevertheless, almost all the cases, export duty reductions or elimination were undertaken as an export promoting measure.

In Ethiopia even though they were not successful, there were attempts to promote export since the imperial government, during this period much emphasis was given to import substitution than export promotion. Despite the measures taken by both the Imperial and the Derge regimes to diversify the export basket and promote exports, the Ethiopian export products remain

Undiversified and are still concentrated on very few primary products like coffee, hides &skins oil seeds & pulses and chat.

In post 1991 period different measures were taken to for promotion of export. Among the measures taken then were devaluation of birr, export licensing simplification, tariff revisions, export tax incentives like duty draw back were introduced.

In 1995,a separate proclamation was established to promote exports. And the objective of this proclamation was to promote exports by granting exports tax incentives by system like the voucher system, duty drawback, bonded manufacturing warehouse. And many exporters were starting to use those tax incentives since the publication of the proclamation, since then the proclamation was amended as well as modified to include new forms of export tax incentives, and the number of users of those tax incentives are increasing from time to time. The paper is organized as follows. In chapter two of the paper we review the theoretical and empirical literature reviews. Chapter three provides model specification. Chapter four presents the summary of major findings.

1.2. Statement of the problem

Owing to a strong link between rapid economic growth and export growth, countries attempted to accelerate economic growth by designing Export-Led Growth strategy [baale E, MutenyoJ.2011]. For instance, a robust economic performance of the "Four Asian Tigers"(South Korea, Taiwan, Hong Kong and Singapore) in the second half of the 20[th]century has been largely attributed to the performance of the external sector where the export sector was given a greater emphasis. Over the past two decades, developing countries have progressively increased their share in global trade from just less than a quarter to about a third [Yishak T.2009].

Understanding the role of export on economic growth in particular and economic development in general, the government of Ethiopia established export trade incentive

Schemes through proclamation No.249/2001(later replaced by proclamation No. 543/2007 and then by proclamation no.768/2012).

The aim of this paper is there foreto examining the trend of both export & export trade tax incentive schemes and the effect of such incentives on export growth in Ethiopia.

1.3 Research questions

The main research questions are:-

- Are tax incentives significant in increasing export in Ethiopia?

- What are the effects of the tax incentives on export composition?

- Are export taxes incentives are the only best incentives to promote the export of the country?

- Are the intended beneficiaries exploiting the incentives as per the expectations of the policy?

1.4Objective of the study

1.4.1 General objectives

The general objective of this study is to examine the type and trend of export incentive schemes and their effect on export growth in Ethiopia. This thesis also have the general objective of creating awareness for local as well as foreign business community to use their incentives on a proper manner.

1.4.2 Specific objectives

And the specific objectives of this study are:

- ✓ To explore the different tax incentives available for exporters in Ethiopia and evaluate trend of the tax amount forgone through those incentives,

- ✓ Assess the relationship between the export incentives and the growth of export,

- ✓ To present policy recommendations to promote export growth and as the same time secure government interests.

1.5 Data Source

For this project data related to the type of export incentives, performance of export, amount of tax forgone as a form of tax incentives are required therefore the study will be based on secondary data which will be collected from different secondary data sources such as books, journals, bulletins, newspapers etc. secondary data's will be collected from different governmental offices like the Ethiopian Revenue Customs Authority, Ministry of Trade, National bank of Ethiopia, MOFED,EEA and the like.

1.6 Research Methodology

The study will employ statically descriptive methods to show the trend of tax forgone through these incentives, trend of export growth in terms of value, volume and composition. On the other hand econometric models will be employed to show the effect of variables on export growth, time series data regression will be employed to show how the incentives have relationship with export value.

1.7 Significance of the study

This study will be of the first kind to discuss the export tax promotion in detail and this will give readers as well as business entities involve in the export sector gain deep understanding on the incentives available for them and use it properly in accordance the laws and regulations. It will also help policymakers give much emphasis on these incentives which give more benefit tousers.

1.8 Scope and Limitations

The focus of this research paper is to examine the effect of tax incentive on export growth and to look at the different types of export incentives in Ethiopia for the period 1990-2014. This study faced challenges from the fact that the export data is not collected primarily for this type of analysis, Therefore the biggest problem of this work is shortage in the availability of data. Additionally, there is also shortage of previous works on this subject matter.

1.9 Organization of the paper

This paper is divided in to four chapters. Chapter one is an introduction which includes statement of the problem, objectives and research questions. Chapter two reviews literatures and previous researches which are related to the topic. Chapter three defines data, variables and methodology followed by discussion and analysis. Chapter four provide conclusions and recommendations.

CHAPTER TWO-LITRATURE REVIEW

2.1 Theoretical Literature Review

2.1.1 Role of Export on Economic Growth

Export is considered to be the driver of economic growth by many scholars, for example Adam Smith's theory of international trade assumes that a previously isolated country about to enter into international trade possesses a surplus productive capacity above the requirements of domestic consumption. With trade the country is able to reallocate the given resources as to provide the new effective demand for the output of the surplus resources. Hence, a surplus Productive capacity suitable for the export market appears as a costless means of acquiring imports and expanding domestic economic activity [Meier, 1995 and Myint, 1958].

One of the export-based models formulated to present a dynamic view of how an economy's growth can be enhanced by expansion of its exports is the staple theory of growth.

According to this theory, the discovery of a primary commodity in which a country has a comparative advantage or an increase in demand for its comparative advantage commodity leads to an expansion of resource-based export commodity which in turn induces a higher growth of aggregate and per capita income. The export of the primary product also has effects on the rest of the economy through reducing unemployment and underemployment, inducing a higher rate of domestic saving and investment, attracting an inflow of factor inputs into the expanding export sector, and establishing links with other sectors of the economy [Meier 1995, p.460].Feder (1982) views a given economy as if it consists of two distinct sectors: an export and non-export sector. According to him the marginal factor productivities are significantly higher in the former

than the latter. This arises from inter-sectorial beneficial externalities(capacity utilization, economics of scale incentives provided for technological improvement and efficient management due to competitive pressures from abroad) generated by the export sector. Thus, growth can be generated by reallocation of the existing resources from the less efficient non-export sector to the higher productivity export sector.

According to Kavoussi (1984) and Moschos (1987), export expansion raises factor productivity and leads to various benefits, such as more efficient use of resources and adoption of technological innovations, resulting from foreign competition, greater capacity utilization and gains of scale effects associated with large international markets.

Jung and Marshal (1985) argue that growth in real exports tends to cause growth in real GNP for three reasons. First, export growth may represent an increase in the demand for the country's output and thus serve to increase real GNP. Second, an increase in exports may loosen a binding foreign exchange constraint and allow increases in productive intermediate imports and hence result in the growth of output. Third, export growth may result in enhanced efficiency and thus may lead to greater output.

Chow (1987) suggests that in small open economies, export growth can expand their limited domestic markets, and contribute to the economics of scale necessary for industrial developments. Furthermore, export growth integrates domestic economy with regional and/or global economies thereby expanding the dimension of competition to the international markets. Competition promotes resource allocation in developing countries as they transform from less productive farming sector to relatively more productive manufacturing sector.

Therefore, factor productivities are improved through export growth.

According to the "balanced growth" doctrine, there is a vicious circle present, which acts as stumbling block in attaining self-sustaining growth. Rosenstein-Rodan (1943) and other squoted

in [Krishna, 1998 et.al] argue that: "Firms did not industrialize because there was no market for their goods and there was no market for their goods because income was low and income waslow because firms did not industrialize. This kind of low level equilibrium, it was argued, could be broken by the simultaneous industrialization of large part of the economy, and any failure to industrialize was essentially viewed as a coordination problem. Of course, "exports, by breaking this circle of causation, could provide an important avenue for growth" [p. 1].

On the other hand the "unbalanced growth" doctrine led by Albert O. Hirshman (1958), while agreeing on the existence of a vicious circle, argue that industrialization of certain leading sectors would pull along the rest of the economy. Hence instead of industrialization of a large number of sectors, what was needed was the industrialization of the "leading "sectors. Then through backward and forward linkages these sectors would initiate the industrialization of the rest of the economy. Exports, especially in such leading sectors, could play important role to start the industrialization process.

Esfahani (1991) emphasized that the first and foremost purpose of exports is to relieve the import shortage that many developing countries confront. According to him although the externality effect of exports (efficiency of resource allocation, economy of scale and various labor training effects) may carry some weights of their own, the major purpose of exports to GDP growth is alleviating the import shortages, which restrict the growth of many LDCs.

Thus exports can fill the "foreign exchange gap" that was perceived as obstruction to growth.

According to [Krishna, 1998 et.al] exporting firms, especially multinationals could provide externalities by serving as conduits for the dissemination of world class technology to less dynamic domestically oriented firms. Because international markets for technology and knowledge are imperfect, exporting helps to overcome some imperfections and permits access to

international best-practice technology through other mechanisms. Generally, all of the above discussed theories explain the different roles of export on economic growth of a country.

2.1.2 Types of Export Incentives

In the previous topic we have seen the role of export on economic growth as discussed by many scholars and theories which shows the need of export to induce economic growth. If it is true that export have key role in economic growth of a country, so how should countries promote their export? And what are the exports incentives will be discussed below.

Governments provide different export incentives to promote their products competitiveness in the international market. Countries sometimes resort to various export promotion schemes or request special and differential treatment for their exporters to overcome export barriers in international trade. Such barriers include existence of high cost of production of exportable products due to tariffs and other related costs. Tariffs on imports create a disincentive to export by directly raising the domestic price of imports relative to exports by reducing the price of exports relative to imports. According to TokarickS (2007),reducing import restrictions in the form of tariffs is a policy option that both developing and developed countries could implement in order to improve incentives to export. According to Ashenafi and Getaneh(2013)Export trade incentives can be broadly grouped into three categories as Fiscal Incentive, Financial incentive and non-monetary incentives. Each incentive is discussed below.

2.1.2.1 Fiscal Incentives

It includes all measures taken to reduce disincentives to export efforts caused by duty or other charges on exports, duties on imports required for production of exports; duties on imports of materials and components required for the production of manufactured goods as well as a duties on production that add unnecessary cost to the selling price of export products (Hibbert E,1990). This group consists of incentives including tax concessions on export earning; exemption/reduction of export duties; accelerated depreciation methods for export industry; temporary admission of materials incorporated in export goods; exemption, rebate or refund of sales tax, purchase tax and internal taxes and adjustment in export tariffs.

According to Oyejide Ademola T.2012, fiscal incentive schemes such as duty drawback and exemptions, manufacturing under bonded warehouse and establishment of export free zones are considered 'compensatory' which are targeted to eliminate disincentives raised from economy's trade, investment and exchange regimes by assuring equal footing with foreign competition in terms of access to inputs at world market prices. However, the duty-drawback schemes that countries employ in an attempt to remove the bias against exports due to tariffs on imported intermediate inputs often do not eliminate the bias completely. [Tokarick S,2007] stated that this is justified based on the ground that the scheme is costly to administer; reduces government revenue, leading to increase in distorting taxes which themselves might discourage exports; and drawbacks do not reverse the decline in the relative price of exports as a result of a higher tariff.

2.1.2.2 Financial Incentives

These are designed to make export business attractive through compensation for price disadvantage resulting from internal regulations that are not oriented towards export promotion Hibbert E, 1990. Such category of incentives includes: Direct/indirect Cash subsidies; Export credit facilities for pre-shipment and post shipment transactions; Special foreign exchange allocation and remission of tax normally chargeable on profits. According to Erzan R.1991, financial access through affordable interest rate enables exporters to eliminate their financial constraints. OyejideAdemola T described financial incentives as 'autonomous' and 'complementary' measures that are aimed at providing special incentives for exporting activities that are not necessarily related to any disincentive that would be associated with the prevailing trade, investment and exchange rate regimes. Furthermore, Banerjee A, argue that financial subsidies help correct distortions created by poor credit markets, and therefore can boost export growth.

2.2 Empirical Literature Review

2.2.1 Export Incentives and Their Role in Export growth

Literature on export tax incentives and sectorial industrial policies in a middle income country context suggests that productive diversification, especially one extending to production and export of nontraditional manufactured exports, is needed for sustainable economic growth as it usually provides the goods with the most value added and provides opportunities for knowledge transfer and economies of scale. Exports also promote economic growth as they facilitate imports of goods, services, and capital, and thereby also transfer of new ideas and technology. In fact, Bernard and Jensenwrite that "exporters are better than non-exporters. A growing body of empirical work has documented the superior characteristics of exporting plants and firms relative to those producing solely for the domestic market. Exporters are larger, more productive, more capital-intensive, more technology-intensive, and pay higher wages (1999, pp. 1-2)." Similar to this approach, a branch of the literature, including Rodrik(2003), argues that in a developing country context, the promotion of non-traditional activities may require government-supported inducements because potential investors in non-traditional products operate in an environment with a high level of information uncertainty. The most compelling piece of evidence in support of incentives is that the vast majority of manufactured exports in the successful Asian economies utilized at least one of the incentive facilities. These countries have provided different incentives including preferential financing, promotion subsidies, tax incentives, subsidized infrastructure, and foreign investment incentives (YanagiharaT, Sambommatsu S,1997).A world bank study in 1993 and Weiss J.2005 have indicated four elements for the successful export push strategies in Asian countries: access to imports at world prices, provision of export financing to encourage the expansion of new export activities; market penetration strategy through export subsidy and

through the creation of international trading companies. These countries pursued strictly result-oriented policies; if a scheme did not generate results in the form of higher exports in a relatively short period of time, it was promptly canceled. Secondly, exports provided a performance-based criterion for allocating credit, encouraged the adoption of international standards, and accelerated the diffusion of technology (OyejideAdemola T).

In Africa, countries endeavored to mimic successful Asian countries. For instance, in Kenya,

The government subsidized credit through specialized financial institutions and commercial bank, provisions of such export incentives as Export Compensation Scheme (until 1989), Manufacturing under Bonded Warehouse (introduced in 1989), export promotion zone (introduced in 1990) and Import duty exemptions schemes directed at exporters who werenot using the export compensation scheme was introduced [World Bank. 1996]. In Zimbabwe, the government introduced such schemes as Inward Processing rebate scheme (similar to manufacturing under bond) and Duty drawback scheme. In Nigeria, the export assistance and programs of the government are largely based on the government's assistance and fiscal policies which included incentives such as currency retention scheme, manufacturing under bond warehouse , duty drawback, export credit and insurance scheme, export development fund and the like [Wangwe Samuel,1995]. However, the effort did not bear as much fruit either due to complexity of procedures; long delays in getting some of the incentives; limited access for such incentives [World Bank. 1996]; and poor implementation of incentive policies and programs [Bright O, Dum O,2010]. This is confirmed by Oyejide Ademola T. who finds that the implementation of economic wide incentive schemes in many low income countries has been flawed due to inadequate development of necessary instruments, institutions and mechanisms.

According to [World Bank. 1996] in countries (including Africa) where money and financial market are not well developed and are highly segmented, exporters can't enjoy neutral status

without a special export financing system. These places exporters at a disadvantage compared to both foreign competitors and local beneficiaries of credit rationing, and make it harder to exploit the export capabilities of developing countries. Firms relative to those producing solely for the domestic market, exporters are larger, more productive, more capital-intensive, more technology-intensive, and pay higher wages (1999, pp. 1-2)." In line with this approach, a branch of the literature, including Rodrik (2003), argues that in a developing country context, the promotion of non-traditional activities may require government-supported inducements because potential investors in non-traditional products operate in an environment with a high level of information uncertainty.

As part of a set of policy instruments developed to stimulate industrialization and economic diversification, the practice of giving export incentives is near universal, despite its use having been controversial for decades. The extent and the form of export incentives vary from country to country depending on the country's economic structure, its overall resource availability, and the effectiveness of export incentives in realizing its export potential. Measures used by governments to enhance exports range from direct subsidies (i.e. export grants, widely used by the European Commission and the US under agricultural assistance schemes), finance assistance (i.e. France has traditionally been an active provider of subsidized export credit), tax incentives (i.e. Malaysia has provided tax breaks based on export performance), Export processing zones (EPZs), or through indirect measures such as R&D assistance and subsidized infrastructure (applied by Korea and Hong Kong SAR, China). Due to the increasingly restrictiveness of WTO rules regarding export incentives, government support occurs more frequently earlier in the production chain (e.g. in the form of investment incentives). Furthermore, WTO s Agreement on Subsidies and Countervailing Measures (SCM Agreement) clearly specifies which export incentives constitute a subsidy and hence subjected to the disciplines of the Agreement, i.e.

potentially illegal and subject to fines. While the SCM Agreement exempts low income countries, this exemption does not imply immunity from countervailing duty procedures, should the subsidized products cause material injury to domestic industries in importing countries (R. Ahuja, 2001).

2.2.2 Export Incentives in Ethiopia

2.2.2.1 Pre 1991/92

The policy adopted in the pre-1991/92 period (both in the Imperial and Military government of Ethiopia) was characterized by strongly inward-oriented development strategy, which used a prolonged over valuation of the Birr, high tariff rates, extensive foreign exchange control and other non-tariff barriers as well as heavy taxation on exports. These polices are likely to have a detrimental impact on export by influencing directly or indirectly the profitability and competitiveness of exports. Even though both previous government of Ethiopia were commonly pursuing import substitution strategy and export sector was secondary for them in their economic development plans (Debel.G ,2002), Even though priority was given to import-substitution industrial promotion and infrastructural facilities like road development while it gave minor attention for export promotion, there were some effort to promote and diversify the country's exports. For example both previous government of Ethiopia made effort to promote exports and diversify the entire export commodities as shown in the three different five-year development plans of the Imperial Government of Ethiopia (IGE) and in the Derge's ten year perspective plan. The first five year development plan (1957/58-1962/63) of the imperial regime gave priority to import-substitution industrial promotion and infrastructural facilities like road development while it gave minor attention for export promotion. Where as in the second five-year plan,

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

The third-five year development plans (1969/70-1973/74) gave a great deal of attention for foreign trade in general and for the export sub-sector development through diversifying variety of export items in particular. In order to increase the exports of manufactured item, special emphasis was given for the strengthening of hides and skins processing. The plan also stipulated diversification of exports mineral products such as potash, gold and others. It was believed that such a move would help the country realize balance of payment improvement. During the plan period, export was envisaged to double with reduced cost of production and improved quality. In addition the plan stipulated a three-fold increase in non-agricultural exports such as textiles, wood products, building materials, non-metallic products and chemical industry products. To implement the plan, the then existing system of duty draw back on direct raw materials and other components of export product was revised. In addition, both fiscal and monetary incentives were offered for both domestic and foreign investors engaged in export-goods production.

In sum, although attempts were made in all the three development plans of the Imperial Government of Ethiopia, this didn't bring the anticipated export promotion and diversification.

The military government who came to power in 1974/75 under took a ten-year perspective plan of 1985/86-1994/95. The main objective of the plan was to orient the country's export structure towards manufactured products from the already existing primary exports of agricultural product, to expand substantially the country's foreign exchange earnings through exporting diversified industrial, mining and agricultural products and to diversify export markets and reduce over dependence on traditional ones. In order to achieve its objectives, the military government

employed a multitude of strategies. These include promotion of exports through the provision of favorable tax, tariffs and foreign exchange rate measures, improving exports in terms of quality, quantity and variety and providing current information on World market prices and other factors in the international market to exporters and producers. In order to publicize and expand the market for the country's export products, the government took part in international trade fairs and encouraged the export of manufactured products and strengthened chambers of commerce and other institutions which are directly engaged in promoting export trade.

Generally speaking, despite the efforts taken by both the Imperial and the Derge regimes to promote and diversify exports, the Ethiopian export products remain undiversified and are still concentrated on very few primary products like coffee, hides &skins oil seeds & pulses and chat. This is because both regimes used overvalued exchange rate, high rate of tariffs and other trade restrictive commercial policies that developed strong anti-export bias, and strongly in-ward oriented trade policies favoring import substitution than export promotion. Although export promotion incentives like export subsidy and others were provided, these have neither resulted in the export diversification nor in the expansion of the existing export volume. This was so because the incentive provided were not enough to counter-balance the anti-export-bias caused by currency overvaluation, high duties (tariffs), taxes and others (Debel G.,2002)

2.2.2.2 Post 1991/92

According to Debel G, in 1991 the transitional government of Ethiopia (TGE) together with the IMF and the World Bank has undertaken liberalization and structural adjustment program to address the internal and external imbalances of the economy. In particular trade policy reform

was undertaken which aimed at promoting exports through diversifying the country's commodity exports. Among the measures undertaken the following were important ones.

a) Devaluation of the Ethiopian currency by more than 140 percent in terms of US dollar to make exports competitive and promote export trade. In addition a weekly auction of foreign exchange was introduced and to guarantee that the incentive pass to the peasants, the government set a floor price for coffee, haricot bean and sesame seed.

b) The tariff regime was continuously revised and was reduced on a stage basis from a maximum of 230 percent to50 percent. Similarly, to nullify the anti-export bias, the state lifted a 2 percent transaction tax on non-coffee exports and abandoned the direct financial subsidy on export.

c) The import and export licensing system were simplified and become more transparent so as to encourage new entrants in the export market. The range of goods and services covered by the auction has been progressively extended and finally fully liberalized.

d) A duty draw back scheme was introduced where by exporters are re-funded the tax and duty they paid on the inputs and raw materials used in export production. This is to provide exporters a free trade status on their import of intermediate inputs and encourage non-traditional export products, especially that of manufactured goods. But the effectiveness of the scheme on export is constrained by lengthy administrative requirement to get re-funded.

e) A foreign exchange retention scheme has been introduced which entitles exporters to retain 10 percent of their earning to hold in their account and to sell the 40 percent at a competitive rate, while submitting the remaining 50 percent directly to the National Bank. But the scheme may not be beneficial in view of the usual control over the use of the retained 10 percent and for the fact that it ties up the working capital.

f) A preferential interest rate scheme is also introduced for exporters, which is less by 3.5 percent compared to the interest rate paid on non-export activity loans. Such low preferential interest rate

scheme is provided for exporters because it is believed to strengthen the country's export diversification efforts.

g) State exporting enterprises were provided a managerial autonomy but deprived of a monopoly power. This creates conducive environment for private exporters and puts them at equal footing with public enterprises.

h) The Ethiopian Export Promotion Agency is established very recently as an autonomous body by proclamation No.132/1998. The main objective of the agency is to promote the country's exports. By doing so it is believed to achieve export diversification in agricultural, industrial and mining sectors of the nation's economy.

After wards, having realized the role of export in driving economic growth and hence development, the government has been working to create an environment conducive for expansion of the export sector. Among the measures is to establish a legal frame work on export trade incentives, there for the government established export trade incentive schemes through proclamation No.249/2001(later amended by proclamation No. 543/2007 and 768/2012respectively) and issued various directives on the establishment of different financial incentive schemes. It provided a lot of support in the form of financial and fiscal incentives. According to Ashenafi and Getaneh for instance, the fiscal incentives provided have grown from ETB 176mill in 2003 to ETB 1.12bill in 2011, and financial incentives reached ETB 1.215bill in 2008 from ETB 362mill in 2005.

This led to changes in the export sector performance. For instance, the real value of export earnings increased from ETB 5 billion in 1973-1978 to ETB 39.7 billion from 2000/1-2006/7.

In terms of diversification, although coffee is still the dominant export item, the share of non-coffee agricultural exports and major manufacturing export commodities (leather and leather products; textile; and agro processing products) has increased remarkably and reached 63.7% during the same period. Furthermore, the export destination countries increased from 68 in 1997 to 126 in 2011.As a result of these trade policy reforms a remarkable decrease in the anti-export-bias incentive structure and an increase in export volume and earning was realized.

CHAPTER THREE-MODEL SPECIFICATION

3.1 The Data

The study used secondary data on export and incentives collected from Ethiopian Revenue and Customs Authority (ERCA), National Bank of Ethiopia (NBE), Development Bank of Ethiopia (DBE) and world economic outlook report (WEO). The export data of the country is collected from ERCA data base. Data related to Exchange Rate (ExR) index and GDP growth rate were collected from NBE. The study employed time series data for each variable from 1990 to 2014, hence 25observations.To indicate whether there is change or not in the export value growth before and after the policy introduction in 2001and to obtain a meaningful econometric result, the author decided to increase the sample data used in the analysis from what is in the proposal (2005-2013) to 1990-2014.

3.2 Econometric Methodology

To show the effects of the incentives for export which are offered by the government, this study employs a combination of methods including trend analysis and time series econometric analysis.

3.3 Definitions of Variables

The dependent variable of the study is Export Growth, the author preferred to measure the export growth in terms of its value. Export value is defined as the value of annual export expressed in USD.The dependent variable is believed to be affected by GDP growth, and Exchange Rate.

3.4 The Model

To show the effect of the export incentives which are introduced 2001, the author prefers to evaluate the structural stability of export before and after the introduction of export tax incentives. By structural change, we mean that the values of the parameters of the model do not remain the same through the entire time period. To find out that weather a structural change has in fact occurred, the data for export value (EXV), Gross domestic product growth rate (GDPGR) and Exchange rate (ExR) for the time period1990-2014 is considered. Export function that relates export value (EXV) to Gross domestic product growth rate (GDPGR) and Exchange rate (ExR). According to Gujarati, 2004, the chow test is appropriate method of testing the structural stability of the dependent variable export value. Therefore, let us divide our sample data into two time periods: 1990–2001 and 2002–2014, the pre- and post-2001 time periods.

Now we have three possible regressions:

For the Time period 1990–2001: n_1=12

$EXV_t = \lambda_1 + \lambda_2 GDPGR_t + \lambda_3 ExR_t + U_{1t}$ ……………………….…… (1)

Time period 2002–2014: n_2=13

$EXV_t = \gamma_1 + \gamma_2 GDPGR_t + \gamma ExR_t + U_{2t}$ ……………………..………. (2)

Time period 1990–2014: N= (n_1+n_2) =25

$EXV_t = \alpha_1 + \alpha_2 GDPGR_t + \alpha_3 ExR_t + U_{3t}$.…………………………………… (3)

Where U_{1t}, U_{2t} are the error terms

Regressing equation 3 assumes that there is no difference between the two time periods and therefore estimates the relationship between export value (EXV), Gross domestic product growth rate (GDPGR) and Exchange rate (ExR) for the entire time period consisting of 25 observations.

In other words, this regression assumes that the intercept as well as the slope coefficient remains the same over the entire period; that is, there is no structural change.

If this is in fact the situation, then $\alpha_1 = \lambda_1 = \gamma_1$, $\alpha_2 = \lambda_2 = \gamma_2$ **and** $\alpha_3 = \lambda_3 = \gamma_3$

Regressions (1) and (2) assume that the regressions in the two time periods are different; that is, the intercept and the slope coefficients are different, as indicated by the subscripted parameters. In the preceding regressions, the u's represent the error terms and the n's represent the number of observations.-

This is where the **Chow test** comes necessary, this test assumes that:

1. $U_{1t} \sim N(0, \sigma2)$ and $U2t \sim N(0, \sigma2)$. That is, the error terms in the sub period regressions are normally distributed with the same (homoscedastic) variance $\sigma2$.

2. The two error terms U_{1t} and $U2t$ are independently distributed.

The mechanics of the Chow test are as follows:

Regression of (3), which is appropriate if there is no parameter instability, and obtain RSS3 with df= $(n_1 + n_2 - k) = (12+13-3) = 22$, where k is the number of parameters estimated, 3 in this case. And the number of observations is 25. We call **RSS$_3$** the **restricted residual sum of squares (RSSR)** because it is obtained by imposing the restrictions that $\lambda_1 = \gamma_1$, $\lambda_2 = \gamma_2$ and $\lambda_3 = \gamma_3$, that is, the sub period regressions are not different. by regressing (1) and (2) RSS1 is obtained for df=9 and RSS2 with df=10

Since the two sets of samples are deemed independent, we can add RSS1 and RSS2 to obtain what may be called the **unrestricted residualsum of squares (RSSUR),** that is, obtain:

RSS$_{UR}$ = RSS$_1$ + RSS$_2$ with   df= $(n_1 + n_2 - 2k)$

Now the idea behind the Chow test is that if in fact there is no structural

Change [i.e., regressions (1) and (2) are essentially the same], then the **RSS$_R$** and **RSS$_{UR}$** should not be statistically different. Therefore, if we form the following ratio:

$$F = (RSS_R - RSS_{UR})/k/ (RSSUR)/ (n_1 + n_2 - 2k) \sim F [k, (n_1 + n_2 - 2k)......\text{(4)}$$

Then Chow test has shown that under the null hypothesis the regressions (1)and (2) are (statistically) the same (i.e., no structural change or break) and the *F* ratio given above follows the *F* distribution with *k* and $(n_1 + n_2 - 2k)$ degree of freedom in the numerator and denominator, hypothesis is formulated as:

$H_0:$ = no structural change or break

$H_1:$ = structural change or break,

Regression of RSS (regression using all the data, before and after the structural break), RSS_1 (regressions on the data before the structural break) and RSS_2 (regressions on the data after the Structural break) is done respectively. Therefore, we do not reject the null hypothesis of *parameter stability* (i.e., no structural change) if the computed *F* value in an application does not exceed the critical *F* value obtained from the *F* table at the chosen level of significance (or the *p* value) and vice versa.

3.5 Descriptive Analysis

3.5.1 Ethiopia Investment Incentives

Ethiopia has implemented Economic Reform Program (ERP) and has been modernizing tax and custom administration by overhauling the legislations and improving administration since 1992/93 with the aim of encouraging trade, investment and hence development. Given the important role of FDI in the development process of developing countries, Ethiopian tax policy is geared towards promoting investment, supporting industrial development and broadening thetax base and decreasing the tax rate in the view of financing the need of government expenditure. With the view of creating investment friendly environment and attract foreign direct investment, Ethiopian government have been providing a wide range of fiscal incentives (Ethiopian Customs and Revenue Authority, 2011).

The Transitional Government of Ethiopia (TGE) issued the first investment code (Proclamation No. 15/1992) on May, 25 1992 with the aim of encouraging private investment under this code areas eligible for investment incentives were limited to manufacturing and Agriculture sectors. The incentives provided were 100% exemption from custom duty on importation of capital goods and income tax exemption (tax holiday) ranging from 1-8 years depending on type and location of the investment. This proclamation had been in force for four years and replaced by Proclamation No. 37/1996 in June 1996.The revised Investment Code of 1996 extended areas eligible to incentives to Education, health, tourism and construction sectors. Capital entry requirements for joint ventures reduced from US$500,000 to US$300,000 and for technical consultancy services reduced to US$100,000. This code was opened the real estate sector and Electricity and water supply to foreign investors, extended the losses carried forward provision, and cut the capital gains tax from 40% to 10%. Furthermore Proclamation No. 37/1996 improved and replaced by proclamation No.116/1998 in June 1998. The major changes introduced in this proclamation were Defense and telecommunication sectors allowed to private sectors to invest jointly with government which was reserved for government only in the earlier codes. The investment code was also amended in July 2002 (Proclamation No. 280/2002) and in September 2012 (Proclamation No. 769/2012) and further liberalized the investment regime and removed most of the remaining restrictions. In general all areas of investments are open for foreign investors except Banking, insurance and microcredit and saving services; forwarding and shipping agency services; broadcasting services; and air transport services using aircraft with a seating capacity of up to 20 passengers which are reserved for government, domestic investors and Ethiopian nationals.

Investment incentives provided in the investment codes are free repatriation of capitals; Duty free importation of goods and vehicles related to the investment; Tax holidays up to eight years; Opening and operating foreign currency accounts; owning immovable property for the purpose of the investment, Loss carry forward, duty drawback scheme and voucher scheme. Among the fiscal incentives given the most popularly used are custom duty exemption and income tax exemption (tax holiday).

3.5.1.1 Tax Holiday (Exemption from Income Tax)

Any investors who invest to establish a new enterprise in manufacturing, agro-processing, production of agricultural products and information and communication technology development are entitled to income tax exemptions. Any income tax derived from approved new investment shall be exempted for periods of 1 to 8 years, depending upon the priority area of investment activities and the geographical location of the investment. Conditions for income tax exemption eligibility are:-

- If at least 50% of its production is to be exported; Profit Tax Exemption Years is 5 Years, if the Investment is made in relatively under-developed regions, the exemption period is 6 years.

- If at least 75% of its production will be an input for the production of export items; Profit Tax Exemption Years is 5 Years, if the Investment is made in relatively under-developed regions, the exemption period is 6 years.

- If the project is evaluated under a special circumstance by the BOI; Profit Tax Exemption Years is no longer than 7 Profit Tax Exemption Years. If the Investment is made in relatively under-developed regions the exemption is No longer than 8 years. However, the granting of income tax exemption for a period longer than 7 years requires the decision of the Council of Ministers.

- If less than 50% of the production is to be exported; Profit Tax Exemption Years is 2 Years, if the Investment is made in relatively underdeveloped regions the exemption shall be 3 years.

- If the production is for the local market; Profit Tax Exemption Years is 2 Years, if the Investment is made in relatively underdeveloped regions it will be 3 years.

In addition investors that establish new enterprise in the regions of Gambella, Benshangul, Afar, Somali, Guji and Borena and South Omo Zone are entitled to an income tax deduction of 30% for three consecutive years after the expiry of income tax exemption.

For expansion or upgrading of enterprises that increases the existing production by 25% in value and 50% of the production is to be exported; the Profit Tax Exemption granted is 2 years. Notwithstanding the information given above, directives issued by the Board may prohibit exemption from income tax with respect to an investor who supplies his products only to the domestic market. Moreover, an investor who exports hides and skins after processing up to crust level is not entitled for income tax holiday. The period of exemption of profit tax begins from the date of commencement of production or provision of services, as the case may be.

3.5.1.2 Custom Duty Exemption

To encourage private investment and to promote the inflows of foreign capital the government of Ethiopia provide an incentive of custom duty exemption for investors engaged in eligible new enterprise or expansion project. The eligible sectors are Agriculture, manufacturing, construction, education, health, electricity and water supply and hotel and tourism. These incentives include:-

- 100% exemption from the payments of custom duties and other taxes levied on imports granted to all capital goods, such as plant, machinery and equipment and construction material.
- Spare parts worth up to 15% of the total value of the imported investment capital good, provided that the goods are also exempt from the payments of custom duties.
- An investor granted a custom duty exemption will be allowed to import spare parts duty free within five years from the date of commissioning of a project.
- With the exception of few products (e.g. semi-processed hide and skins-150%) no export tax is levied on export products of Ethiopia.
- Any investors who export or supplies to an exporter as a production or service input, at least 60% of his product or service shall be entitled to income tax exemption for 2 years in addition to the exemption period provided.

- Duty paid at the port of entry or locally, on raw materials used in the production of commodities is refunded, 100%, upon exportation of the commodity processed.

3.5.2 Export Trade Incentivesin Ethiopia

In addition to the above general investment incentives there are also other export duty incentive schemes available for exporters. They are Duty Draw-Back Scheme, Voucher Scheme, Bonded manufacturing warehouse Scheme, bounded export manufacturing factory scheme, bounded raw materials supply warehouse and industry zone.

3.5.2.1Duty Drawback Scheme

Under the duty draw-back scheme exporters would be refunded 100 percent of the duty, including indirect taxes, paid on raw materials used in the production of commodities up on exportation of the commodities processed. If the imported raw material is re-exported in the same condition, the duty that should be drawn-back is 95 percent. When an exporter prefers to use this export incentive scheme, taxes and duties paid on raw materials are drawn back at the time of export of finished products. The duty draw back scheme applies to all taxes at the time of importation, and those paid on local purchases. But this incentive is not more utilized because of its capital tying up behavior. The users of this scheme are producer exporters, indirect producer exporters, raw material suppliers and exporters. This scheme was first introduced in 2001 and further revised in 2007&2012.

3.5.2.2 Voucher Scheme

Under this scheme vouchers are issued by the Customs Authority to exporters having manufacturing license and fulfilling the eligibility criteria, stipulated in proclamation No. 249/2001, in the amount of taxes and duties to be paid on raw materials imported by them for their export production. A voucher is a document having monetary value printed by the Ministry of Finance and Economic Development for use as deposit for duties and taxes payable on

imported raw materials**.** This scheme is the most widely used scheme by exporters, in this scheme exporters are expected to have a voucher entitlement certificate from ministry of industry and voucher book from Ethiopian revenues and customs authority. Exporters prefer to use the voucher schemebecause this scheme doesn't hold money as the controlling mechanism is after export. Exporters import raw materials without paying duties and taxes for the production of exportable products and becomes free if they full export what they imported after processing otherwise they are expected to pay taxes and duties adding 50% of the taxes and duties in the form of penalty. From the start of the implementation of the export incentives the users of voucher system have increased from time to time. Currently voucher scheme users are above 20% of the total exporters of the country. Even though there are some additional export incentive options they are not widely practiced. Therefore, the author focuses on the voucher scheme to show the growth of export by export scheme users and the growth of their level of the export incentive usage.

3.5.2.3 Bounded Export Manufacturing Warehouse Scheme

This is a duty-free importation scheme, which allows exporters having manufacturing license and insured warehouses that fully comply with all customs laws and regulations to import the required raw materials free of duties for use in the production of manufactured exports. Beneficiaries of this scheme are those exporters who are not eligible to use the voucher scheme.

3.5.2.4Bounded Export Factory Scheme

Beneficiaries of the bonded export factory scheme are those who have; engaged exclusively in production of export commodities, obtain certificate of eligibility from ministry of industry and a manufacturing plant which meets the standards of Ethiopian revenues and customs authority.

In this scheme raw materials are directly entered in to the factory where the production takes place without paying taxes and duties, after production the beneficiary should export the

processed products within 1 year otherwise the beneficiary is subject to the payment of tax and duties plus 50% of the taxes and duties as a penalty. The method of control is the factory compound is under the control of customs; any activity of bringing into or taking out from the factory is with the permission of the customs authority. This scheme is the latest to be introduced as an export tax incentive by the proclamation 768/2012.

3.5.2.5 Bounded Input Supplies Warehouse Scheme

Beneficiaries of the bonded input supplies warehouse scheme shall be persons who have obtained certificate of eligibility from the Ministry of Industry and who have warehouses meeting the standards set by the Ethiopian Revenues and Customs Authority.

Input supplies imported by beneficiaries of the bonded input supplies warehouse scheme shall be transported from a customs post to such warehouses under the control of customs without being subject to payment of duty.

Input supplies imported under the bonded input supplies warehouse scheme should deliver their inputs to producers within one year. If it is not delivered to a producer within one year of being transferred into a bonded supplies input warehouse, the beneficiary shall, in addition to the duty payable on the input supplies, be required to pay 50% of the duty; provided, however, that the Ethiopian Revenues and Customs Authority may extend such period by one additional year taking into consideration the nature of the input supplies. This scheme is introduced by proclamation no.768/2012.

3.5.3 Trends of Export Performance in Ethiopia

3.5.3.1 Trends in Export Value

Exports of goods and services comprise all transactions between residents of a country and the rest of the world involving a change of ownership from residents to nonresidents of general merchandise.

As depicted in fig3.1 below, the growth of export value of the country shows an increasing pattern despite some fluctuations during the study period.

During the study period, the lowest value earned from export is 372.72 million dollar which is recorded in 1992 and the highest export value recorded is 2.98 billion dollars in 2014.As we can see from the above graph export value have increasing pattern from the introduction of export trade incentives in 2001.In 2001 when the export proclamation was introduced, the export value was 1,024.60 million dollar whereas the in 2014 the export value increased to 2.98 Billion dollar with an average growth rate of 8.81%.
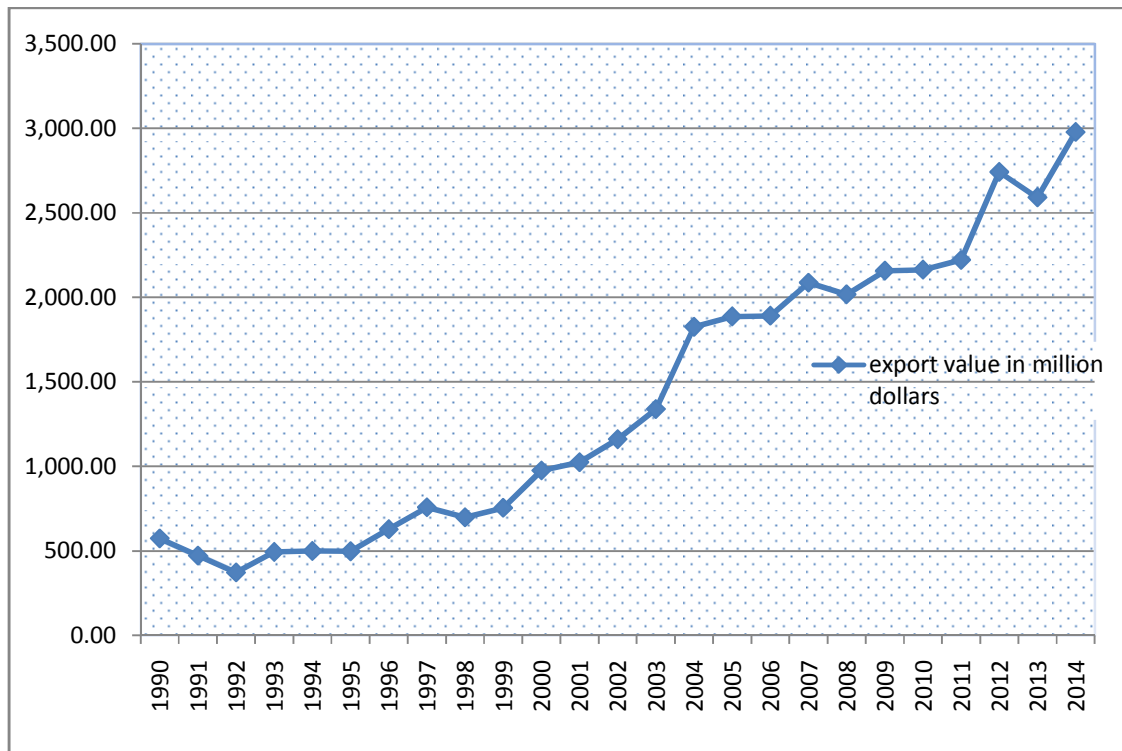
Fig3.1 Trend of export value

Source: Ethiopian revenue and customs authority and authors own compilation.

3.5.3.2 Trend in the Share of Export by Incentive users of Total Export

Since the introduction of the export trade duty incentives in 2001, exporters have started to use the incentives and export according to the rules and regulations specified in the proclamations. Even though the implementation of the proclamation has its own limitations, it contributed to increase in the share of exports by the beneficiaries of the incentives.

Table3.1: share of export by incentive beneficiaries to total export

Year	Total export(million USD)	Export by incentive beneficiaries(million USD)	Share of Incentive based exports in total exports (%)
1997	587.15	67.76	11.54
1998	577.35	49.80	8.63
1999	447.38	41.45	9.26
2000	481.78	58.44	12.13
2001	453.17	90.17	19.90
2002	473.42	75.97	16.05
2003	642.12	84.05	13.09
2004	553.37	96.00	17.35
2005	896.63	114.90	12.81
2006	999.39	161.94	16.20
2007	1,183.27	233.73	19.75
2008	1,542.86	252.41	16.36
2009	1,493.64	246.59	16.51
2010	2,147.31	321.57	14.98
2011	2,542.30	467.04	18.37
2012	2,741.30	426.83	15.57
2013	2,591.04	482.12	18.61
2014	2,977.92	487.98	16.39

Source: Ethiopian revenue and customs authority and author's own compilations

As we can see from the above table, the share of exports by export duty incentive users in the total export of the country shows ups and downs since the introduction of the incentive scheme. Before the introduction of the export incentives the average share of the exporters 10.39 percent of the total export whereas after the introduction of the incentives in 2001, the average export by the exporters which use the export trade duty incentives have significantly increased to 16.57 percent. Therefore it can be deduced that the export incentives have contributed to the increase in the share of exports by export trade incentive users, however the share is not that much satisfactory as many exporters fail to use the export incentives. The reasons for the failure of exporters to properly use the incentives are excessive data requirements and the controlling

mechanisms by government authorities which are backward and manual based which create obstacle from using the incentives.

3.5.3.3 Trends in Export Value Growth

As depicted in the below fig3.2, the export growth curve shows an increasing pattern over the study period with some fluctuations.
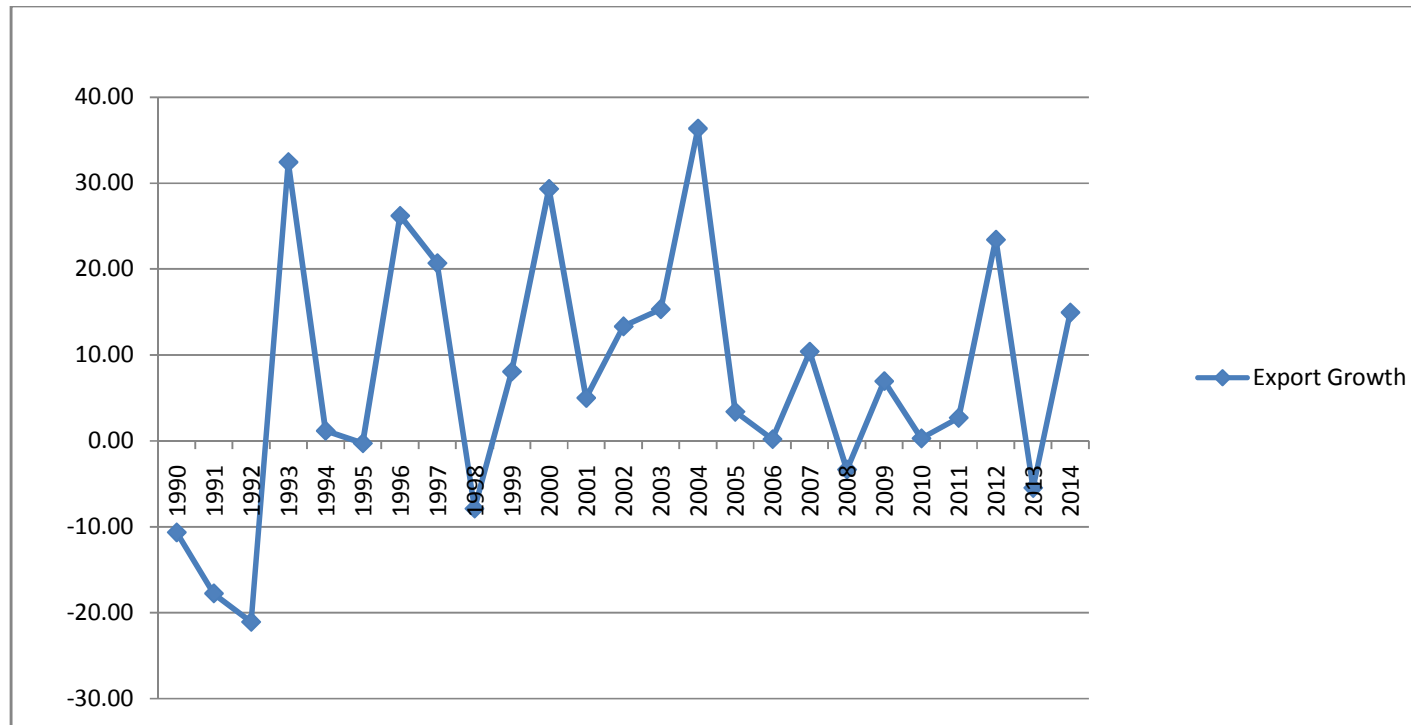
Fig 3.2.Trends of growth in export

Source: Ethiopian revenue and customs authority and authors own compilation.

The value for Exports of goods and services (annual % growth) in Ethiopia was -10.65% as of 1990. As the graph above shows, over the past 25 years this indicator reached a maximum value of36.34% in 2004 and a minimum value of -21.08%in1992.After the introduction of the incentives in 2001, the average export growth becomes 8.81% which is greater than the average growth rate of the overall study period which is 7.34%.Therefore one can see the introduction of this incentives contribute to the growth of export in its monetary value.

3.5.3.4 Trends in Export as Percentage of GDP

The growth of the ratio of Exports of goods and services to GDP (% of GDP) in Ethiopia were 4.65% as of 1990. Its highest value over the past 25 years was 18.33 in 2004, while its lowest value was 2.58 in 1992.
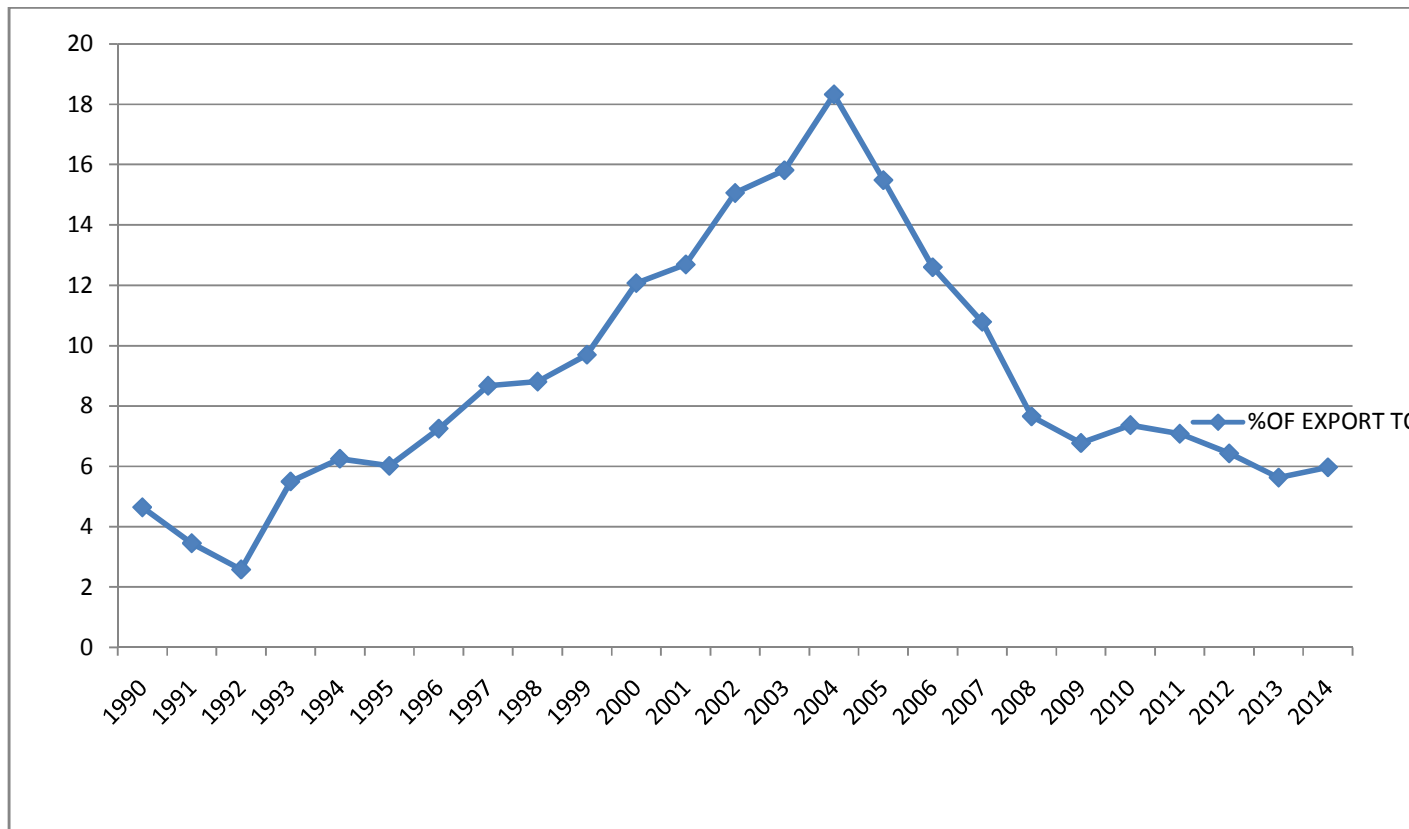
Fig.3.3 Trends in share of export to GDP

Source: National bank of Ethiopia and author's own compilations

As we can see from the above graph, the average percentage of exports to GDP in throughout the study period is 8.91%.when we compare the average percentage of exports to GDP before and after the introduction of export duty incentives proclamation no.249/2001,one can understand that the average percentage of exports to GDP after the introduction of the incentives which is

10.55% is higher than the average percentage of exports to GDP before the introduction of the incentives which is 7.3%.Therefore,it indicates the introduction of this export trade incentives through the above proclamation contributes to the growth of exports which intern contributes to the growth of the share of exports in the GDP of the country.

3.5.3.5 Ethiopian Export Destinations

Ethiopia has maintained long commercial relations with different countries of the world for centuries starting from its immediate neighbors to the rest of the world.

Table3.2: Percentage share of major export destination countries

COUNTRY	YEAR			
	1990/91-1995/96	1996/97-2001/02	2002/03-2007/08	2008/09-2013/14
Djibouti	8.78	10.80	5.26	3.66
Kenya	0.04	0.46	0.48	0.37
Sudan	0.46	0.05	3.01	4.15
France	4.47	3.32	2.27	1.34
Germany	27.57	17.37	11.11	8.59
Italy	7.93	7.74	5.42	2.59
Netherlands	1.90	1.51	4.38	6.38
U.K.	4.20	2.77	2.69	1.93
Russia	0.03	0.02	0.24	0.42
U.S.A.	6.50	5.68	5.75	3.75
U.A.R	0.59	0.70	2.86	2.74
Yugoslavia	0.11	0.00	0.00	0.00
China, P.Rep.	0.07	0.60	5.61	10.34
Japan	14.70	10.29	7.03	1.83
Saudi Arabia	6.73	7.94	6.26	5.72
Rest of the World	15.91	30.75	37.64	46.21
Total Export	**100.00**	**100.00**	**100.00**	**100.00**

Source: National bank of Ethiopia and author's own compilations

In the fiscal years1990/91-1995/96, Europe accounts for 46.11% of Ethiopia's total merchandise exports. Within European countries, Germany was the largest market which had 14.1percent share in total Ethiopian exports. Italy was the second important destination market within Europe accounting for 7.93 percent of Ethiopia's export proceeds. France, constituting 4.47 percent of Ethiopia's total export was another major export destination.

About 22.2 percent of the total Ethiopian export proceeds originated from Asian market of which japan, Saudi Arabia and United Arab Emirates had 14.70 percent, 6.73 percent and0.59 percent share, respectively. The major export items shipped to Japan include Coffee, oilseeds and flowers. Coffee, meat & meat products, oilseeds, live-animals and flower were the main commodities shipped to Saudi Arabia. Meat and meat products, coffee, pulse, oilseeds, live-animals, flower and food were the major products exported to United Arab Emirates.

Meanwhile, about 9.28 percent of Ethiopia's total export proceeds were from Africa of which Djibouti and Sudan, constituted 9.24 percent of the total export proceeds. Exports to Djibouti mainly included vegetables, live- animals, chat and coffee while pulses, coffee, spices, live-animals and textiles were the main exports to Sudan. Export earnings from American market comprised 6.5 percent of Ethiopia's total export proceeds. The United States imported mainly coffee, leather and leather products, oilseeds, flower and food. During the above specified fiscal years the remaining 15.9 percent of export proceeds goes to the rest of the world. The concentration of Ethiopia's exports to a limited number of countries is clearly seen from the structure of Ethiopian foreign trade in the above specified time period.

Similarly In the fiscal years 1996/97-2001/02, the highest export of Ethiopia which is 32.73 percent goes to European countries; still Germany holds the leading rank with export proceedings of 17.37 percent followed by Italy and France with export proceedings of 7.74and 3.32 percent respectively. Export to the rest of the world had shown significant increase which with the share of 30.75 percent. Africa holds the third rank with export share of 11.31 percent among the African countries Djibouti is the leading export destination with the share of 10.8 percent of the total exports.

In the fiscal years 2002/03-2007/08, Export to the rest of the world i.e. export to countries not specified here shows a significant increase and accounts for 37.64 percent followed by Europe

with share of 26.10 percent and Asia with share of 21.75 percent. With regards to countries Germany still becomes the leading destination of Ethiopian exports with the share of 11.11 percent followed by japan with share of 7.03 percent.

In the fiscal years 2008/09-2013/14, Export to the rest of the world continues to show a significant increase and accounts for 46.21 percent followed by Europe with share of 21.24 percent and Asia with share of 20.63 percent out of the total exports of the country. In this period the new leading export destination for Ethiopian exports becomes china with share of 10.34 percent followed by Germany with share of 8.59 percent.

From the above table we can understand that, In the fiscal years 2002/03-2007/08 and2008/09-2013/14, export to rest of the world have significantly increased which shows diversification in the destination of Ethiopian exports and this is consistent with the idea that the introduction of export incentives in 2001 have contributed to the diversification of exports in the country. This export destination diversification is considered to have many advantages as it improves the competitiveness of the country in the international market by providing market options to export.

3.5.3.6 Commodity and Sectorial Structure of Export

Commodity structure of the Ethiopian export sector is a mirror reflection of the country's overall export performance.

Table3.3Commodity Structure of Exports (%of total)

	Year					
Commodities	1990/91-1997/98	1998/99-2001/02	2002/03-2005/06	2006/07-2009/10	2010/11-2013/14	1990/91-2013/14
Coffee	59.10	51.49	40.29	31.35	26.60	41.76
Oilseeds	7.20	7.73	17.40	19.60	16.35	13.66
Leather and Leather products	-	11.78	8.90	5.15	3.97	5.96
Pulses	*	3.85	4.29	7.36	6.75	4.45
Meat Products	0.60	0.63	1.62	1.68	2.48	1.40
Fruits & Vegetables	0.80	1.51	1.92	1.28	1.42	1.39
Sugar	0.50	1.29	1.07	0.32	0.00	0.63
Gold	4.90	6.97	8.02	10.20	17.88	9.60
Live Animals	0.20	0.20	1.60	3.89	6.02	2.38
Chat	9.40	14.33	12.52	9.61	8.93	10.96
Bee's Wax	-	0.21	0.15	0.11	0.08	0.11
Text. & Text. Prdts	0.50	-	1.01	1.11	3.04	1.13
Flower	-	-	1.20	8.33	6.47	3.20
others	16.80	-	-	-	-	3.36
Total	100	100.00	100.00	100.00	100.00	100.00

Source: Ethiopian Revenue and customs Authority and own calculation.

The nation's output and exports are highly concentrated in agricultural commodities, while the share of non-agricultural products in total merchandise exports is almost insignificant. For the past fifteen years, primary agricultural products accounted for 70-80 percent of the merchandise export earnings of Ethiopia. Among the major export products, as shown in Table 3.3 above, coffee accounts for the lion's share of primary exports and of total merchandise exports as well. From 1990/91-2013/14coffee alone accounted for 41.76 percent of the total export proceeds?The

smallest share of coffee in the total export was 26.6 percent in 2010/11- 2013/2014and the largest share was 59.1 percent in 1990/91-1997/98.From the above data we can see that the share of coffee is decreasing from time to time which indirectly shows the increase in the non-coffee exports which intern indicates the varieties of export of Ethiopia are increasing.

Following coffee, oilseeds and pulses together rank second in their share in the total merchandise export during the period 1990/91-2013/14.During this period, their share in the total export proceeds was about 18.1percent. The share was the highest during the Period 2006/07-2009/10.Therefore oils seeds and pulse's share of export shows an increment. The third commodity which contributes the highest share to export during the above time period is chat, its' share was 10.96 percent during 1990/91-2013/14 and is increasing from time to time.

When we see some of the manufactured products like textile and leather products, even though it is improving from time to time, their share of total export is small. For example the share of leather and leather products and textile and textile products for the period 1990/91-2013/14 was 5.96 and 1.13 percent respectively. In general the export sector of the country is highly dependent on primary agricultural products with a total export share of 77.91 percent. The manufactured products export share is only 9.13 percent during the above specified time period. Furthermore, commodity concentration index(Hirschman Concentration index) for the first five products (coffee, leather and leather products, chat, oilseeds and pulses, gold and fruit and vegetables) during the period 1997/98-2013/14 is 0.46. This indicates that the export sector is concentrated on few products. The concentration index before the introduction of export incentives in 2001 is 0.57 and after the policy change is 0.46, this shows that the concentration index is decreasing from time to time which shows more new products are starting to have significant share of the export of the country. This supports the expectation that the policy of export trade tax incentives have positive effect on the commodity composition of export.

3.6 Discussion of Empirical Findings

Any meaningful regression is performed with the time series variable if before running a regressionthe data were tested to detect if there aremulticolinearity and autocorrelation problems. Variance inflation factors (VIF) and tolerance are used to detect multicollinearity. And as the result shows the VIF is less than 10 and the tolerance is also higher confirming that there is no severe multicollinearity between the explanatory variables. A Durbin-Watson test was also used to detect the presence of autocorrelation in addition to the graphical method .The results of tests indicate thenull hypothesis of no autocorrelation is not rejected at 1% level of significance.

In the descriptive statistics presented below the means and the standard deviation of the variables show a significant variation with the two time periods (before and after the policy introduction).

Table 3.4 descriptive results for variables before and after 2001

Descriptive Statistics						
before				after		
	Mean	Std. Deviation	N	Mean	Std. Deviation	N
EXV	645.896	203.676	12	2081.55	506.09	13
GDPGR	5.138	4.577	12	9.17	3.93	13
ExR	5.698	2.296	12	12.29	4.30	13

Source: SPSS results

As we can see from the above table, the average export have variation before and after the introduction of the incentives before the policy has introduced the average export was about 645.896 million USD, however the average export have grown to 2081.55 million USD after the policy introduction.

Table3.5 RSS (residual sum of squares) before structural break time(1990-2001).

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	290028.201	2	145014.101	7.848	.011[b]
	Residual	166295.881	9	18477.320		
	Total	456324.082	11			
a. Dependent Variable: EXV						
b. Predictors: (Constant), ExR, GDPGR						

Source: SPSS results

Table3.6 RSS (residual sum of squares) after structural break time(2002-2014).

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2654536.925	2.000	1327268.463	31.680	.000[b]
	Residual	418964.339	10.000	41896.434		
	Total	3073501.264	12.000			
a. Dependent Variable: EXV						
b. Predictors: (Constant), ExR, GDPGR						

Source: SPSS results

Table3.7 RSS (residual sum of squares) after structural break(1990-2014)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13609124.986	2	6804562.493	53.810	.000[b]
	Residual	2781996.152	22	126454.371		
	Total	16391121.139	24			
a. Dependent Variable: EXV						
b. Predictors: (Constant), ExR, GDPGR						

Source: SPSS results

Further, it was understood that a single regression line is not a good fit of the data due to the obvious structural break in 2001 caused by the introduction of the export trade tax incentives. Then analyses of 3 separate regression equations were done which are more efficient than one regression equation over the whole period. This needs the Chow test;based on these out puts the test statistic was calculated as follows:

$$F = \frac{(2781996.152 - 585260.22)/3}{(585260.22)/19} = 23.77$$

The critical value for F (3, 19) is 3.13 at 5% significance level. This implies that the test statistic (23.77) is greater than the 95% critical value (3.13) of F-test; it is possibleto reject the null hypothesis of no structural break times in export variable under investigation. Similarly the critical value for F (3, 19) is 5.01at 1% significance level. This implies that the test statistic (23.77) is greater than the critical value (5.01) of F-test; it is possible to reject the null hypothesis of no structural break times in the variables under investigation.

Therefore, analysis with chow test using F-test estimation technique indicates that there is structural break time for the variables under investigation. This shows the export trade incentives introduced in 2001, to support the export have effects on the export growth of the country.

When we see the correlation of the variables with export we can see that export is positively related with both GDPGR and ExR.

Table 3.8 Correlation results among the study variables

variables	EXV	GDPGR	ExCR
EXV	1.000	.539	.897
GDPGR	.539	1.000	.440
ExR	.897	.440	1.000

Source: SPSS results

As table 3.8 shows the correlation between export value and exchange rate is higher which shows when the exchange rate for the country increases export increases which calls for the depreciation of birr against USD. Export and GDP are less correlated which shows the share of export in the GDP of the country is minimal.

CHAPTER FOUR-Conclusion and Policy Implications

4.1Conclusion

This study has attempted to examine the effect of export incentives on export growth in Ethiopia over the period 1990 to 2014. The findings suggest that the country's export earning showed a sustained increase since introduction of the incentive schemes. Despite the fact that the country's export earning is predominantly from few primary commodities such as coffee, cereals, oilseeds, pulses and hides & skins, the country's export diversification strategy seems to have borne fruit during the study period. This is evidenced by a decline in export concentration. The study revealed that there was no significant improvement in value added exports over the study period. Export of manufactured goods constituted, on average, 9.13 percent of the total export, implying that the country's exports are still dominated by non-manufactured export items. The study also shows that the market access of the country's product has increased. However, the average percentage of exports to GDP in throughout the study period is 8.91%.when we compare the average percentage of exports to GDP before and after the introduction of export duty incentives proclamation no.249/2001, the share of the total merchandise export revenue to the GDP is only increasing and becomes10.55 percent .We found that there is positive relationship between export growth and export incentives, and our time series econometric analysis revealed that export incentives have effect on export growth(value).Despite the fact that the country's export earning is predominantly from few primary commodities such as coffee, cereals, oilseeds, pulses and hides & skins, the country's export diversification strategy seems to have borne fruit during the study period. This is evidenced by a decline in export concentration Index (HHI) from 0.57 in the years before 2001 to 0.46 in the years after 2001.in addition the decline of coffee in the share of total export from 59.1 percent in the period 1990/11-1997/98 to 26.6 percent in 2010/11-

2013/14 shows the share of other products in total export is increasing. The study revealed that there was no significant improvement in value added exports over the study period. Export of manufactured goods constituted, on average, 9.13 percent of the total export, while the primary agricultural products account for 77.91 percent of the total export, implying that the country's exports are still dominated by non-manufactured export items. The study also shows that the even though there is increase in the growth of share of exports from 7.3percent before the introduction of the incentives to 10.55 percent after the introduction of the incentives ,the increase is insignificant which shows less contribution of the export sector to GDP of the country. Besides the econometric analysis of performing the chow test shows there is structural instability in the model which shows export have increased after the introduction of the export trade tax incentives by the government in 2001.The country's export growth is positively related to GDP growth and exchange rate. The study also shows the number of type of export incentives have increased from 3 types in 2001 to about 7 types in 2013; this shows the government's concern for the improvement of exports. However the share of exports by the incentive beneficiaries in the period 1997/98-2013/2014 was on average15.19 percent which implies the share by the incentive users is not significant in the total export of the country.

4.2 Policy Implications

The policy recommendation that emerges from this study is that the government should attempt to diversify and promote exports in order to fully exploit the benefits of the sector and promote economic growth. In this regard, the policies towards export promotion are crucial. The export incentives by the government aim mainly for price competitiveness. However, the global competitive market on the other hand demands more than that not only support only towards price competitiveness but also support on quality, product differentiation, delivery time, meeting different standards, and related others system that is conducive for efficient export promotion. To this regard, the following measures should be taken.

- The implementation of the export incentives should be revised and take measure actions against the time consuming and backward method of export incentive controlling mechanisms which push aside exporters from using the incentives offered by the government. Specifically, duty draw back scheme should be very effective which allows exporters get a refund of the tax and duty they pay on the inputs they use on export production but unless they get the tax drawback on the time they need, it becomes obstacle instead of incentive. The same goes with the other incentives.

- To improve the export sector, well organized and structured export promotion agency plays a key role, so this study calls for the establishment of export promotion agency.

- Domestic exporters capacity should be built by increasing the competitiveness of exporters in the world market the bias against exports should be greatly reduced. This can be achieved for instance by providing exporters an automatic access to foreign exchange for the purchase of their intermediate goods and also providing them a

preferential interest rate on bank loans which is much lower from the interest rate paid on non-export loans.

- The incentives should be on merit based, currently the incentives are given to all exporters which fulfill the preconditions stated on the proclamation, however the incentives might be more effective if they can be given on selective bases of exporter's performance, sector involvement, foreign exchange earnings, forgone tax to foreign exchange earnings ratio etc.

- Better to have additional incentives which are not based on price competitiveness but also on other conditions which contribute to export like quality, quantity, value addition, skilled manpower development etc.

- Simple and short method of controlling mechanism should be adapted and control should be based on risk.

- This study also calls for further study based on every company's data.

In summation, the above measures to be undertaken in order to reduce and eliminate the supply constraints deterring the performance of export sector are somewhat general. A closer look and detailed investigation into each sectors is very important if export promotion and diversification schemes are to be successful.

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ANEX 1

Estimation Results for the period 1990-2001

Descriptive Statistics			
	Mean	Std. Deviation	N
EXV	645.8958	203.67623	12
GDPGR	5.1383	4.57736	12
ExR	5.6975	2.29551	12

Correlations		EXV	GDPGR	EXCR
Pearson Correlation	EXV	1.000	.191	.788
	GDPGR	.191	1.000	.385
	ExR	.788	.385	1.000
Sig. (1-tailed)	EXV		.276	.001
	GDPGR	.276		.108
	ExR	.001	.108	
N	EXV	12	12	12
	GDPGR	12	12	12
	ExR	12	12	12

Variables Entered/Removed[a]			
Model	Variables Entered	Variables Removed	Method
1	ExR, GDPGR[b]		Enter

a. Dependent Variable: EXV

b. All requested variables entered.

Model Summary[b]										
					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.797[a]	.636	.555	135.93131	.636	7.848	2	9	.011	.779

a. Predictors: (Constant), ExR, GDPGR

b. Dependent Variable: EXV

ANOVA[a]					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	290028.201	2	145014.101	7.848	.011[b]
Residual	166295.881	9	18477.320		
Total	456324.082	11			

a. Dependent Variable: EXV
b. Predictors: (Constant), EXCR, GDPGR

Coefficients[a]										
	Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
Model	B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	252.116	109.286		2.307	.046					
GDPGR	-5.872	9.700	-.132	-.605	.560	.191	-.198	-.122	.852	1.174
ExR	74.410	19.343	.839	3.847	.004	.788	.789	.774	.852	1.174

a. Dependent Variable: EXV

CollinearityDiagnostics[a]						
				Variance Proportions		
Model		Eigenvalue	Condition Index	(Constant)	GDPGR	EXCR
1	1	2.665	1.000	.02	.04	.01
	2	.271	3.135	.10	.91	.04
	3	.064	6.435	.88	.05	.95

a. Dependent Variable: EXV

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	390.878	838.056	645.896	162.377	12
Residual	-176.576	186.544	0.000	122.954	12
Std. Predicted Value	-1.571	1.183	.000	1.000	12
Std. Residual	-1.299	1.372	.000	.905	12

a. Dependent Variable: EXV

Estimation Results for the period 2001-2014

Descriptive Statistics

	Mean	Std. Deviation	N
EXV	2081.5508	506.08804	13
EXCR	12.2950	4.29649	13
GDPGR	9.1715	3.92730	13

Correlations

		EXV	EXCR	GDPGR
Pearson Correlation	EXV	1.000	.847	.483
	ExR	.847	1.000	.121
	GDPGR	.483	.121	1.000
Sig. (1-tailed)	EXV		.000	.047
	ExR	.000		.346
	GDPGR	.047	.346	
N	EXV	13	13	13
	ExR	13	13	13
	GDPGR	13	13	13

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	GDPGR, ExR[b]		Enter

a. Dependent Variable: EXV

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
					Change Statistics					
1	.929[a]	.864	.836	204.68618	.864	31.680	2	10	.000	1.808

a. Predictors: (Constant), GDPGR, ExR

b. Dependent Variable: EXV

Coefficients[a]

Model		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
		Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
1	(Constant)	467.26	214.05		2.183	.054					
	ExR	94.26	13.86	.800	6.803	.000	.847	.907	.794	.985	1.015
	GDPGR	49.66	15.16	.385	3.276	.008	.483	.719	.382	.985	1.015

a. Dependent Variable: EXV

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2654536.925	2	1327268.463	31.680	.000[b]
	Residual	418964.339	10	41896.434		
	Total	3073501.264	12			

a. Dependent Variable: EXV

b. Predictors: (Constant), GDPGR, ExR

CollinearityDiagnostics[a]

Model		Eigenvalue	Condition Index	(Constant)	EXCR	GDPGR
				Variance Proportions		
1	1	2.843	1.000	.01	.01	.02
	2	.111	5.052	.02	.33	.78
	3	.046	7.894	.97	.66	.21

a. Dependent Variable: EXV

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1277.8612	2673.4163	2081.5508	470.33117	13
Residual	-404.28265	304.50369	.00000	186.85207	13
Std. Predicted Value	-1.709	1.258	.000	1.000	13

Estimation Results for the period 1990-2014

Descriptive Statistics

	Mean	Std. Deviation	N
EXV	1392.44	826.42	25
GDPGR	7.24	4.64	25
ExR	9.13	4.79	25
Std. Residual	-1.975	1.488	.000	.913	13

a. Dependent Variable: EXV

Correlations

		EXV	GDPGR	EXCR
Pearson Correlation	EXV	1.000	.539	.897
	GDPGR	.539	1.000	.440
	ExR	.897	.440	1.000
Sig. (1-tailed)	EXV		.003	.000
	GDPGR	.003		.014
	ExR	.000	.014	
N	EXV	25	25	25
	GDPGR	25	25	25
	ExR	25	25	25

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	ExR, GDPGR[b]		Enter

a. Dependent Variable: EXV
b. All requested variables entered.

Model Summary[b]

			Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
Model	R	R Square			R Square Change	F Change	df1	df2	Sig. F Change	
1	.911[a]	.830	.815	355.60	0.83	53.81	2.00	22	.000	.588

a. Predictors: (Constant), ExR, GDPGR

b. Dependent Variable: EXV

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13609125.0	2.0	6804562.5	53.8	.000[b]
	Residual	2781996.2	22.0	126454.4		
	Total	16391121.1	24.0			

a. Dependent Variable: EXV
b. Predictors: (Constant), ExR, GDPGR

Coefficientsa

		Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-125.774	166.03		-.758	.457					
	GDPGR	31.732	17.42	.178	1.822	.082	.539	.362	.160	.806	1.241
	EXCR	141.168	16.87	.819	8.367	.000	.897	.872	.735	.806	1.241

a. Dependent Variable: EXV

CollinearityDiagnostics[a]						
			Condition	Variance Proportions		
Model		Eigenvalue	Index	(Constant)	GDPGR	EXCR
1	1	2.731	1.000	.02	.03	.02
	2	.160	4.135	.30	.94	.09
	3	.109	4.994	.68	.04	.89

a. Dependent Variable: EXV

Residuals Statistics[a]					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	166.44	2828.78	1392.44	753.03	25
Residual	-559.86	572.07	0.00	340.47	25
Std. Predicted Value	-1.628	1.907	.000	1.000	25
Std. Residual	-1.574	1.609	.000	.957	25

a. Dependent Variable: EXV

ANEX2: PROPOSAL