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A THESIS SUBMITTED TO ACCOUNTING AND FINANCE DEPARTMENT IN REQUIREMENT FOR MASTER DEGREE IN ACCOUNTING AND AUDITING

TAX EVASION AND AVOIDANCE IN INTERNATIONAL TRADE and TRADE DISCRIPANCY BETWEEN ETHIOPIA & CHINA

AN EMPIRICAL EVIDANCE FOR ETHIOPIA

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ABBREVIATION AND ACRONYMS

CH China

EXP Export

Ex Exchange rate

ETH Ethiopia

ERCA Ethiopian revenue and customs authority

IM Import

NBE National bank of Ethiopia

MNC Multinational company

MoFEC Ministry of finance and economic co-operation

MoTI ministry of trade and Industry

NGOs Non-Governmental Organization

NIPPA National Investment Promotion and Protection ACT

OECD Organization for Economic Cooperation and Development

Tax Tax rate

UN United Nations

UNCTAD United Nations Conference on Trade and Development

WITS world integrated trade solution

Abstract

We believe that the discrepancies in international trade data are more than simply an inconvenience for empirical researchers. Tax evasion, by its nature, is difficult to observe. They may, in fact, reveal a significant amount of information about the incentives of exporters and importers who are confronted with taxes, tariffs, and capital controls, and have incentives to evade them. Quantitative Research Methodology and ratio analysis (model used by As in Fisman and Wei (2004)) is used. The study uses cross-sectional data analysis for three period from 2014-2016. Secondary data were collected, coded and entered into EViews ® 8 Estimation Forecasting · Statistical Analysis Graphics Data Management Simulation for regression analysis. The main objectives of the study is to identify statically significant & economically important co-relation of the observed report discrepancy between imported and exported goods traded between two countries in quantity and value, which may be leads to tax evasion & avoidance. There are a number of incentives for firms to misstate the invoice price of an export-import transaction, such as tax avoidance, tariff evasion, transfer pricing, and avoidance of capital controls. The researcher also used to investigate whether tax rate and exchange rate devaluation is impact on import export trade discrepancy and tax revenue(evasion). Since the late 2014-2016s, reported Ethiopia imports from China and china exported to Ethiopia have show report regularly increasingly in differently. This discrepancy, which is varies by product categories, the regression analysis shows tax rate and exchange rate have appositive relationship and positive coefficients with trade weighted gap shown that as tax rate and exchange rate increases trade weighted gap also increases. The study found that 'tax evasion ' is highly correlated with tax rates & exchange rate: much more value is 'lost' for products with higher tax rates. any increase in tax rate is likely to produce a reduction rather than an increase in tax revenue. The study also uses ratio analysis of import data of goods reported by Ethiopia and export of goods reported by china to identify whether there is trade waited gap & tax evasion between the two countries. If there is no trade waited gap & tax evasion the ratio of import of goods report by Ethiopia to export of goods report by china is one. If the ratio of import of goods report by Ethiopia to export of goods report by china greater than or less than one there is trade waited gap & tax evasion or capital flight in and out of the country. All ratio analysis shows results are less than one. So, the study found that strong statistical evidence of trade waited gap & capital flight from the Ethiopia. By reviewing the existing literature result & Using a model that allows for simultaneous checks for china with other countries indicate that, the study found strong statistical evidence of under-reporting exports at Chinese border to avoid paying value-added tax (VAT) and tax rebate and capital flight. During this study Reviewed from different research under taken shows the chine's tax policy of export trade rebate & vat refund under reporting of export at chine's. Due to this reason chine's exporter also under report export report for the purpose of capital flight control from export country to the chine's . The study also revealed that from the ERCA import data & tax collected provide evidence of tariff evasion at the Ethiopia border chine's product and USA & Europe products imported as Djibouti imported but there is no the reality of trade data report between Ethiopia's and Djibouti reported to the world trade.com (WITTS) data base since 2009. These things done in order to reduce the CIF value of imported goods, because the reality of Ethiopians tax rate & tariff is increasing as CIF value of imported goods increase . Another Reason for trade discrepancy is the recording error or misreport to world trade.com in the Ethiopian side. For example there is import report fuels from china to Ethiopia but the reality is china is not fuels exporter country and there is no report from china export of fuels to Ethiopia. The study provide indirect evidence of tariff evasion at the Ethiopia border or Djibouti border, and indirect evidence of evasion of capital controls (money laundering). The main conclusions drawn from this study are exchange rate & tax rate have significant & insignificant impact on tax collection which leads to tax evasion & avoidance. As tax rate & exchange rate increases trade waited gap between two countries increases. All imported goods report from china to Ethiopia & china export of goods to Ethiopia are significant gap from year to year. The main reason for trade waited gap & tax evasion and avoidance in Ethiopia are High Tax rate on imported goods , foreign currency exchange rate devaluation and shortage of LC in Ethiopia , chine's tax policy of export trade rebate & vat refund, under reporting of export at chine's boarder for the purpose of capital flight control & misleading report of imported goods data & recording error in related applicable entities in Ethiopia. Recommendations that the policy makers come with policies to control the import and export of goods traded between two countries to tighten trade waited gap. The government responsible for tax collection in Ethiopia should come up with tax controlling systems to ensure a fixed exchange rate to prevent depreciation of the domestic currency against other trading currencies. Policy makers come with review the high tax rate on import of goods traded from abroad in order to reduce tax evasion and avoidance. The government should be control and cross check the flow of data recorded & reported between the responsible entities to control, real amount of trade data & Tax evasion & avoidance in Ethiopian.

Key words : trade waited gap, tax rate, exchange rate, tax evasion & tax avoidance & WITTS

CHAPTER ONE
1 INTRODUCTION

1.1 Background of the Study

Tax policy, particularly the problem of international tax avoidance and evasion, once seemed to be the exclusive province of specialist accountants and lawyers. Since the financial crisis of 2008, however, it has risen to the highest levels of international sum IMtry, electoral politics and newspaper front pages. Along the way, 'tax justice' has become a growing strand of development debate and practice, not least because of high profile campaigns run by major international NGOs. Recent special issues of this journal ('The Politics of Taxation,' 2016) and of the Review of International Political Economy ('Revenue Mobilization in the Developing World,' 2016) indicate that academia is catching up with this agenda, and four books published in the last two years will be welcome resources for anyone seeking an overview. The books' shift in focus to the global level complements some earlier works on tax and development, which are more grounded in country-level empirical work (Brauner& Stewart, 2013; Brautigam, Fjeldstad, & Moore, 2008; Fuest&Zodrow, 2013).

The tax difficulties for developing countries are longstanding and increasingly well-known. Paying taxes is not a favorite of all of us, but for the government, and in particular their revenue agency, tax collection is an important activity. Many of us would argue why must we pay taxes? In what ways does the amount paid in taxes benefit us as a nation? Understanding the spirit behind the tax payment is vital. Tax is defined as a compulsory payment to the authorized bodies and yet no implicit rewards are received by the payer (Lymer and Oats 2009). On the other hand, avoiding tax liabilities could be defined in various ways. Tax evasion &Avoidance or non-compliance describes a range of activities that are unfavorable to a state's tax system. These include tax avoidance, which refers to reducing taxes by legal means, and Tax evasion which refers to the criminal non-payment of tax liabilities. Groups that do not comply with taxes include tax protesters and tax resisters. Tax resisters typically do not take the position that the tax laws are themselves illegal or do not apply to them, and they are more concerned with not paying for the particular government policies that they oppose. Tax protesters attempt to evade the

payment of taxes by using trivial interpretations of the tax laws, whilst tax resisters refuse to pay a tax for conscientious reasons.

In Ethiopia, tax evasion has been important source of tax leakage. This has created inability to generate enough tax revenue to meet the growing expenditure of the government (Emerta, 2010). The Ethiopian ministry of Revenues and Customs commission are responsible for overseeing the various reforms and collecting taxes and customs duties among other things. Ethiopian revenue and customs authority was reestablished in 2008 (by proclamation number 587/2008) through the merger of the former Ministry of Revenues, Federal Inland Revenue Authority and the Ethiopian Customs Authority. The formation of Ethiopian revenue and customs authority signals the Ethiopian government's commitment to establishing a modern tax and customs administration system.

1.2 Back Ground of Ethiopian Economy

The Ethiopian economy is linked to the economies of its trading partners in many aspects -- and to mention some -- its industries, service sectors, levels of income, employment, living standards and technology cannot be seen in isolation from the international economy. Although the linkage can take different forms, international trade is one aspect where the Ethiopian economy participates in world trade as a supplier of its products to the rest of the world and a consumer of products from the rest of the world. This dimension of economic integration that involves the flow of goods and services across nations, complex as it is, can, however, result in uneven effects among nations and among sectors within a given nation. After World War IT, exports and imports as a share of national output reached unprecedented levels for many industrial countries with a declining market share in world trade for many developing countries. "The share of intra-African trade in the continent's total trade with the world is not only small but has been declining over the last decade. In 1975, intra-African trade reached a record level of 7.5% of the continent's total trade. However, this high rate declined steadily until it hit its lowest level at 3.7% in 1978. The latest estimates show that intra-African trade has been around 4 per cent" [Ethiopian Chamber of Commerce 1986: 9].

On the other front, the success story in increasing exports of manufactured goods and increasing advantages from world trade by the "newly industrializing countries" moved parallel with the marginalization and inability of a large group of developing nations to take advantages from international trade. Ethiopia falls within these category of nations where foreign trade is believed to have not contributed much to growth and development of the domestic economy.

BRIEF **THEORETICAL BACKGROUND**

Trade induced changes in the developing countries have been unfavorable to the domestic economy and growth through trade, it has been argued, has subjected developing countries to a slow rate of growth of national income and overall development. This has been attributed, among others, to their poor performance and the unfavorable international trading system. Although international trade is believed to provide benefits to domestic producers and consumers, some economists maintain that the current international trading system hinders economic development in countries like Ethiopia, as neither the static gains from trade nor the dynamic

Ghiotgis Tekle: Highlights on the State of Enema! Trade benefits have been realized overtime. It follows that the conventional international trade theory based on the principle of comparative advantage and the Hecksher Ohlin theory has little relevance to the developing countries, as their trade structure is characterized by high degree of dependence on the industrialized countries and not vice versa. Similarly, different from Hecksher-Ohlin trade theory, intra-industry trade and economic integration has been dominant in the international economic relations among nations. In recent years, a considerable proportion (about 75 per cent) of the exports of developing countries went to the advanced industrialized countries, and about 70 per cent of their imports originated from the same countries [UNECA 1989]. This is a clear indication that trade among developing countries is limited, and that they are predominantly linked to the economies of the advanced countries. Moreover, no considerable change in the composition and direction of trade took place in many of these countries, and exports of manufactured goods relative to primary products have not increased in some of the African countries. What is more, exports of manufactured goods by these countries are usually labor-intensive and contain modest amounts

of modern technology in production. Their adaptability and flexibility to changes in world demand is low, and thus their exports have been facing deteriorating terms of trade.

A. Ethiopian's Exports and Imports

Ethiopia's export sector is characterized by overdependence on few agricultural products, with very limited exports of manufactured and semi-manufactured goods. According to UNCTAD calculations, Ethiopia's diversification index is found to be 0.924 with a concentration index of 0.644 which is an evidence of a near complete specialization of the export sector in a few commodities. The structural rigidity of the export sector and the dependence of the Ethiopian economy on primary products is a serious problems for Ethiopian economy and revenue generation in international trade.

B The Ethiopian Economy: Subculture, Problems and Policy Issues

Ethiopia's Major Exports In the Total Value of Exports Coffee, Hides & Skins Pulses Seeds are high share in the earlier Ethiopian export. These four major export items fluctuated from year to year. in terms of value due to the volatile and erratic behavior of prices and unpredictable demand in the international market. Similarly, on the supply side, these agricultural items are influenced by a large number of factors that are endogenous and exogenous to the supplier's production decisions and behavior.

Among the major exports of manufactured goods leather, leather products and shoes and textile products contributed 71 per cent and 10.8 per cent to the total manufacturing exports of Birr 194.3 million in 1988/89 which is about 13 per cent of the total value of exports. According to the National Bank Annual Report of 1988/89, increased domestic demand, tall in international prices and supply shortages are some factors which explain the declining shares of exports of manufactured goods. The export sector of the economy being highly vulnerable to such factors on the supply and demand side, any shortfalls in domestic supply and changes in market demand are expected to have significant effects on export, revenues and consequently on domestic incomes and employment levels. Among other factors, it is believed that the low elasticity of

demand and supply for Ethiopian exports remain to be the underlying key factors in explaining the Stability of product prices and export receipts.

Export revenues are the major source of foreign exchange resources that are badly needed for development, and thus shortfalls in the export sector will reduce export revenues and liIMt the import capacity of the economy. In this direction, unregistered or illegal trades particularly of exports have an important implication. Assuming imports are financed by exports, the export revenues generated have not been sufficient to pay for the country's import bills, and the export/import ratio has been falling, making the economy more dependent on other sources of financing to cover trade deficits. The fall in the export/import ratio which has been due to rising import/GDP ratio and declining shares of exports in GDP in value terms.

Source: Calculated from data in National Bank of Ethiopia, Annual Reports, and various years.

On the import side, industrial inputs, machinery and transport equipments and other investment goods take a larger share of Ethiopia's imports in value terms. This is in line with the priority given for imports of capital goods and other essential inputs necessary for growth.

Accordingly, around 50 per cent of the total exports from Ethiopia are destined to the major five industrialized countries, namely, USA, Federal Republic of Germany, Italy, France and the United Kingdom. The rate of expansion of the export trade with these countries over the period has been increasing. Trade with African countries, on the other hand, has not been expanding, despite efforts towards increasing intra-African trade. These features imply that the linkage of the Ethiopian foreign trade sector is with the advanced industrialized countries that are referred to as price-makers in the world market. The Ethiopian economy, as a small economy in world trade, would then have a low bargaining power and thus cannot decide on prices or sell large volumes in these markets. In fact, world demand and consumption of Ethiopian exports has not grown significantly and, in some instances, has fallen due to technological changes taking place in the industrialized nations. Technical progress in the advanced countries has moved in the direction of cost-reducing innovations which reduce or substitute imports of agricultural raw materials from developing countries like Ethiopia. This is reflected in the declining demand for agricultural exports of these nations and their decreasing market shares in world trade.

Looking at the growth of the commodity exports of the Ethiopian economy, we observe that annual growth rates of the major export items have not been promising. Comparison of the annual growth rates in the value of total exports with the annual growth rates in the value of major export commodities shows that there has been a better performance in coffee and hides and skins, with poor performance in the exports of pulses and oil seeds. The relative decline in agricultural production in general, lack of diversification and the nature of agricultural production techniques, in addition to the factors considered above, have contributed both to the slow growth in the volume of exports and lower prices in the international market.

C .Terms of Trade

One of the mechanisms through which trade contributes to growth is through the terms of trade effects on the domestic economy. The controversial nature of the gains from trade, especially to economies like that of Ethiopia whose exports are concentrated in primal), products, has been tied to the worsening terms of trade. Since the prices of exports and imports are what constitute the terms of trade, it is important to analyses and look at the movements of these prices. However, terms of trade effects on growth and welfare should be viewed with an eye to the causes and effects on quantities of exports and imports or the volume of trade rather than the simple price changes. In the Ethiopian case, there have been fluctuations in prices of both exports and imports, the bad years being 1976, 1977 and 1978 in which the terms of trade highly deteriorated and an improvement recorded only in 1979 to be followed by declining terms of trade for the rest of the period under study. It is, however, difficult to conclude whether developing countries as a whole have experienced deterioration or an improvement in their terms of trade. But it is clear that there are also studies about the terms of trade movements suggesting improvements for developing countries at particular periods [Sporas 1983; Michaely 1984]. The Ethiopian economy has been facing deterioration in its terms of trade, but this cannot be used to make conclusive statements regarding the performance of the economy since there are problems associated with using the terms of trade alone to this effect.

1.3 Statement of the Problem

In most developing countries, like Ethiopia, the revenue generated by the government is quite less than the expenditures spent. This means tax revenue generated by Ethiopian revenue authority is much less than the government expenditure for financing growth and development of infrastructure. This low revenue yield of taxation can only be attributed to the fact that tax provisions are not properly enforced either on account of the inability of administration due to the noncompliance behavior of taxpayers (Abdella and Clifford, 2010).

This problem led the country to face the budget deficit. This under collected tax revenue is mainly attributed to tax evasion and avoidance challenges facing the country as a whole.

Tax evasion and avoidance was higher during the 1970's and 1980's reaching as high as 10.4% of the recorded economy. Although the share as percentage of GDP is declining recently, it is growing on average by about 19 % points in nominal terms since 2000. It remained high but declining since 1991 while tax revenue to GDP ratio start to increase before it start to bend downward since 2004. The declining trend in tax-to-GDP ratio since 2004 is mainly due to the rapidly growing economy in the face of stagnated tax collection efforts (Emrtat, 2010). Note that tax-to-GDP ratio in Ethiopia is one of the lowest in sub-Saharan Africa which is 9.7% (MoFED, 2010) as compared to over 18% for the rest of Africa. It is even much lower than good performers such as China and Namibia where tax revenue reaches 25% and 30.1%, respectively (Volkerink, 2009).

Foregone tax revenues have been substantial due to tax incentives meant to encourage investment. Although the government's attempt to encourage investment is commendable, these tax incentives have been a fertile ground for tax evasion and avoidance.

1.4 Research Questions

The research questions are

What are the reason for the discrepancy of import and export of trade between Ethiopia and china ?

What are the relationship between tax rate and tax evasion and avoidance in international trade of Ethiopia?

What is the relationship between exchange rate and tax evasion and avoidance in international trade of Ethiopia?

1.5 Objectives of the Study

1.5.1 General objective of the study

The main objectives of the study is to identify statically significant & economically important co-relation of the observed report discrepancy between imported and exported goods traded between two countries in quantity and value, which may be leads to tax evasion & avoidance .

1.5.2 Specific objective

- To investigate the relationship between tax rate & tax evasion and avoidance , foreign exchange rate & tax evasion and avoidance
- To determine the impacts of exchange rate devaluation on to international trade and tax collection
- To examine the reason for report discrepancy of import and export data between china & Ethiopia which may be leads to tax evasion & avoidance.

1.6 Significance of the Study

The study is expected to contribute some findings to the noncompliance situation of tax Revenue Authority by examining the reason for report gap between Ethiopian and chine's import and export data discrepancies and the effect of tax rate exchange rate of international trade in Ethiopia that leads to challenges and problems causes & reasons of tax evasion &avoidance in the study area. The study would help to point out specific and efficient methods of limitation of tax evasion and avoidance that would maximize tax collection of revenue and also it would give some highlights to the revenue authority what conditions contribute tax payers to evade and avoid tax in the import export trade. In addition, examine problems of import export trade tax policy which contribute for tax evasion &avoidance.

1.7 Scope of the Study

The research will depend only & cover import export trade problems and challenges of high tax rate & foreign currency exchange rate related to tax evasion and avoidance. The study uses qualitative and quantitative research methodology of 2ndry data from world trade.com WITS & NBE, ERCA, MoTI, MoFEC method.

Main targeted population to complete the research is the import export data based on a mixed method of seeking quantitative responses.

1.8 Limitation of the Study

As it is observed from different researches there is a problem of tax evasion & avoidance in Ethiopian revenue and customs authority. However, due to the time and financial constraints of the researcher, this thesis concentrated on the international trade of import export data. The other problems left for other future researchers.

1.9 Organization of the Paper

This research paper is organized in five chapters each incorporated topics and subtopics. Chapter one provides the necessary background of the study. It states the problem, raises the research

questions. It also describes the objectives, scope, significance and limitations of the study. Chapter two sets the foundation of the study. It reviews existing literature on assessment of tax evasion related issues to extract useful and relevant information and concepts. It also forms the theoretical basis and constructs an analytical framework drawn from the theoretical concepts. Chapter three deals with research area description, methodology such as research strategy, sample size and sampling techniques. It also describes the tools for sources of data, data type and data analysis techniques. Chapter four presents the data collected through applicable software models and statistical analysis which is the sole of the study. Chapter five, in which the researcher finalize the study with final concluding points and by drawing some recommendation.

CHAPTER TWO
2 LITERATURE REVIEW

Introduction

This chapter examines literature review, elaborates terms and concepts used in the study and how these concepts have been defined by various authors. The goal of this review will be to deconstruct the issues addressed in the literature so as to be able to identify the factors, determinants & problems with Tax evasion and avoidance affecting the revenue collection performance. The chapter also provides a theoretical and empirical literature review related to the study.

2.1 Theoretical background

2.1.1 THEORY OF INTERNATIONAL TRADE

International Trade

International trade is the exchange of goods and services between countries. Globalization is a process whereby physical borders are eradicated giving rise to an integration of cultures, trade, systems and process. This has mainly been brought about and hastened by information and technology. Ultimately this causes countries to be affected by activities in other nations that would normally not have affected them.

The clash between Russia and Ukraine over Crimea would most likely affect transit of gas from Russia to Europe. This clearly shows how economies can be affected by world events. Pirates in the Indian Ocean would affect shipments to Eastern Africa.

International trade has both pros and cons. Goods and that are available in only some countries are made available elsewhere. Many Kenyan patients go to India for cheaper and better treatment especially for cancer. Countries that lag behind in terms of technology benefit from inventions from more advanced countries. On the negative side, cultures are eroded and some that are more detrimental than progressive are adopted by way of exposure to the internet and ease of travel to

other nations. In as much as inventions are to make life easier, some ideas are used by terrorists to plan for mass destruction of property and human lives.

As countries become more interconnected through information and technology, international trade is seen to be increasing in leaps and bounds. For example Kenya so far has seen increased interaction with China, a marked deviation from the traditional western countries.

International business includes firms undertaking imports and exports, producing abroad or being involved with joint ventures, licensing or franchising arrangements with a foreign partner. Traditionally, companies are seen as internationalizing incrementally in three stages (Johanson & Vahlne, 1977). From their domestic base firms develop gradually by exporting to another country which is geographically and culturally similar. Of late however, this has been leading to an eventual entry into less similar but strategic country.

Why we need trade theories ?

Trade theory helps managers and government policymakers focus on three critical questions:

1. What products should be imported and exported?

2. How much should be traded?

3. With whom should they trade?

Why Do Nations Trade?

I, A nation trades because it expects to gain something from its trading partner

II, Whenever a buyer and a seller come together, each expects to gain something from the other. The same expectation applies to nations that trade with each other.

III, It is virtually impossible for a country to be completely self-sufficient without incurring undue costs

IV, International trade allows a country

- to specialize in the manufacture and export of products and services that it can produce efficiently

- import products and services that can be produced more efficiently in other countries

- liIMts on imports may be beneficial to producers, but not beneficial for consumers

Major Cause For Trade And Investment Flow

- Difference in Factor Endowments: The skewed distribution of factors of resources i.e. production capabilities, possibilities and scales differ across the nations eventually forced the nation to trade among each other

- Cost Advantage: Trade and investment flows are goaded by cost advantage. Cost leadership is what international firms aim at in a world of thinning down margins.

- Patterns of Specialization: Trade and investment flows are triggered by patterns of specialization. Countries specialize. For example, Germany, Japan, UK and USA are good manufacturing machine tools and equipment, Singapore and India are good in IT and IT enabled services, USA and France are good in Aircrafts, Switzerland, India are good in pharmaceutical goods etc. this Specialization spells need for trade flows.

- Profit from Exchange: Trade and investment flows are motivated by profit from exchange. Milton Friedman would say the sole purpose of businesses is making profit by serving the society. Profit sources are many; one is international exchange. Export sales guarantee more profit per unit sale than comparable domestic sale.

- Diversification of Sources & Markets for Physical & Financial Products and Risk: Trade and investment flows are propelled by the need for diversification of sourcing and markets both for physical and financial products. Multiple sources and markets both for inputs and outputs and both for physical and financial are essential to ward off uncertainties of supply chain and consumer patronage. Exploitation of Natural Resources: Investment and trade flows are driven by profit-seeking transnational corporations that are interested in the exploitation of natural

resources. This pattern of trade and investment leads to a high growth, though that is subject to the vicissitudes of terms-of-trade and risk-return aspects of foreign investments.

Policy "U" turn Towards Mercerization by Many Economies: Since the later part of the 20th century, change from the 'inward-looking import-substitution oriented development framework' to the 'outward-looking export-led growth oriented development and privatization have led to significant dependence on trade and investment inflows as trusted ways to economic development. Common Market / Currency / Economy: At the subregional level, the policy of Common Market / Currency / Economy has facilitated intra-regional trade and investment. Bilateral Trade/Investment and Economic Relationship: which help to open new paradigm that relies on mutual understanding and growth result.

Enabling Multilateralism along with Regional Pluralism: Finally, multilateralism in the form of GATT & WTO and World Bank & Multilateral Investment Guarantee Agency (MIGA) besides others, co-existing with regional pluralism in the form of regional trade blocks and agreements between trade blocks

Advantages of International Trade for MNCs

According to Needle (2010), Multinational enterprises are those enterprises which carry its production activities in more than one country. MNCs find it necessary to explore overseas market for additional profits. Globalization and its expedition by the communication era has necessitated and encouraged MNCs to explore. Trends are changing pretty fast and being adopted even faster by the entire world. A fashion statement in New York is adopted almost instantaneously by citizens of a country in a different continent. MNCs are therefore taking advantage of this interconnection of geographical areas to leverage on cheap resources and new markets. Globalization has turned the world into a global market place where players cut across and even language is a barrier being broken by employing locals. Governments are managed by WTO to keep order in this intertwining web of competing forces for the consumer pocket.

2.1.1.1 New Market Access

When businesses are set up, they mainly seek to satisfy the needs of the consumers in their home country. Exporting overseas could be part of the plans but more in the long term. Different products go through different life cycles in different countries. Firms that seek international markets sometimes are looking to align an old product as a new one in a new market. Therefore, we find products that are a household commodity in the US are pretty new in the African market.

Take the dishwashing machine. This is a standard item in the US, Britain and other first world countries. In Africa however, a dish washer is more a luxury item and considered new in the market. Many households are yet to adopt it as a standard kitchen must have item. When products become mature and standardized, markets tend to get saturated and with a given population, no more growth can be achieved. This is motivation for MNCs to seek markets outside of their comfort zone. With globalization, it is taking less time for products to be exported to other countries. The smart phones are a good example. When the Samsung S7 series was launched, it was ready in several markets at almost the same time including in Africa. The more established markets especially in the developed nations are currently experiencing slow growth as compared to developing countries majority of who are in Africa. MNCs are looking to leverage on this growth by bringing their products and establishing affiliates in Africa.

Heineken, Pernod Ricard Kenya, Louis Vuitton Moet Hennessey are just but a few examples of MNCs that have set up offices within the past five years.

2.1.1.2 Reduced Dependence on Local Market

Firms that trade internationally have reduced dependence on their local markets. For instance, global iconic brands like Gucci, Chivas Regal, Givenchy and many others have presence across the globe. These brands do not depend on their local markets entirely. In fact, most of their revenue and profits are significantly from foreign markets. This independence from local markets protects these firms from risks inherent in their home countries. Should there be an economic depression, they will be cushioned by their overseas investments.

2.1.1.3 Increased Profits

Increased sales naturally means increased profits if the pricing is strategic and right. Therefore, MNCs that trade cross boarders are more likely to make more money than those who don't. Access to foreign additional markets means more sales which translates to more revenues and profits. When firms innovate new products, there's likely to be competition from the same country as the technology could be readily available to them going by countries similarities theory. This means that there will be heavy competition within no time and the fierce fight for the consumer pocket leads to a need to approach a different consumer base that is outside the home country. Firms can sometimes capitalize on these far away markets to charge higher fees for products that go for much lower in their countries. Champagne for instance is relatively cheap in France as compared to Kenya. Products considered pretty standard in home countries could be charged at a premium and considered superior in comparison to where they originate from. Geographical separation of countries ensures that this is possible. Jameson Irish whiskey is an Irish product whose popularity is growing pretty fast. The US is currently the largest consumer of this brand. In Ireland ironically, Redbreast Irish whiskey seems to be the leading Irish whiskey brand and most preferred. Clearly, by expanding the market outwards, Irish distillers are able to tap into new and sometimes very large markets making great profits that would otherwise not be achievable with liIMted markets.

2.1.1.4 Economies of Scale

With massive production of goods, operational efficiencies are achieved. This brings down the cost of per unit production. This particular saving in costs is achieved when firms are producing very large amounts of a certain product. This is only possible when there is corresponding demand. Scoping and entering markets outside of the home market crates this much needed additional demand which in turn saves costs for the firm.

To leverage on this aspect however, the products produced need to be acceptable across the board in their standard formats. If products need much changing for adoption into other markets then it doesn't serve the purpose. The liquor industry is pretty much enjoying economies of scale cost savings since a whisky sold in Japan is likely to be sold in the same format in the US and

Kenya In Kenya, they just need to be labeled in one of the national languages and not be above 40ABV which is pretty much the standard..

2.1.2 Factors that Influence International Trade

Firms do not operate in isolation when trading across borders. There are external factors that are sometimes similar or not to their home countries. When these variables are dissimilar, it takes for a firm to adjust its mode of operations to suit and survive in the unfamiliar external environment. This explains why most countries will trade first with countries that are similar in legislation, culture, demographics, level of development amongst other things, before embarking on new markets in terms of these perceived differences.

2.1.2.1 Economic Factors

Economic factors are those that have to do with the rate of growth of an economy, Exchange rate inflation and interest rates amongst other things. Economic factors are of utmost importance while considering international trade. MNCs have to be careful where they enter as different countries have different potential depending on a population's ability to purchase. Luxury products like expensive liquor, designer clothes, perfumes, cars are more relevant in the developed world. These trickle down to third world countries but the consumption is nowhere near what developed markets purchase in any financial year.

2.1.2.2 Socio-Cultural Factors

The social environment is described by different aspects of a society like level of income, employment or unemployment levels, education and health. Demographics also play a part in social aspects of a society and this ranges from the gender composition, ethnicity, age etc. Culture on the other hand is the norms and beliefs of a community. This dictates their way of life and includes factors like religion, diet, behavior etc.

2.1.2.3 Political and Legal Factors

Political and legal factors ultimately affect the businesses that operate under their jurisdiction. Parliament passes laws that the judicial interprets and follows. Thus these two work in tandem.

2.1.3 International trade and Ethiopia's experience

Ethiopia had formally opened its economy to international trade in 1903. After the end of the Ethio-Italian War, the rise of its exports and imports showed the height of its engagement in international trade. International trade allows Ethiopian consumers to enjoy the goods and services not available in their own country. They buy all kind of products on the international market: food, clothes, spare parts, oil, jewelry, wine, and even currencies. Ethiopians also buy services such as healthcare, tourism, banking, and transportation from many parts of the world. The country also exports to the global and imports from it. Imports and exports makes up its current account in the balance of payments. Historically, coffee had been Ethiopia's leading export merchandise, followed by food stuff including cereals, pulses, and oilseeds.

Ethiopia's exports grew by about 5.6 percent a year on average throughout the 1960s and rose to 8 percent in the 1970s. Exports, however, consisted of only a small share of Ethiopia's total output. It accounted for 4.6 percent of gross domestic product in the 1950s and grew slowly to 7.4 percent in the 1960s. By 1974, Ethiopia's exports made up just 10 percent of total output, with coffee still dominating its trade. Between 1950 and 1954, on average, coffee accounted for 54 percent Ethiopia's total earnings from international trade. As a developing country that relied on exports of primary products, Ethiopia experienced deterioration in its terms of trade with its industrialized trading partners. Compared to manufactured goods, primary products consistently lost values over the years. Heavily depending on the export of a single commodity made things even worse for Ethiopia. Its economic health was dependent largely on world coffee prices over which it had no control. Ethiopia was one of the countries that suffered the consequences of the downward trajectory of world price of raw coffee.

During the decade that followed the end of the war, Ethiopia had a trade surplus. Between 1950 and 1957, there was an annual trade surplus of about 0.2 million Ethiopian Birr (ETB). After

1958, the country experienced growth and developed strong demand for imports. Imports rose faster than exports, and as a result, the 1960s were marked by growing trade deficits that reached 113 million ETB a year. By the beginning of the 1970s, deficits rose to 148 million ETB. Rise of world price of oilseeds and pulses in 1973-74 reversed this trend, and Ethiopia's increased export earnings showed the return of trade surplus during this period. During this period, exports accounted for 13 percent of GDP while imports contributed 12 percent to national income.

Under military rule during the period that spanned nearly two decades, Ethiopia's economy was excessively regulated and virtually closed to international trade. Ethiopia became isolated and inward-oriented. Ill-advised economic restructuring based on central planning and nationalization of all private enterprises reduced the vibrant private sector virtually to futile small-scale activities. Government controlled marketing establishments that offered poor prices compared to what farmers could have obtained in a free trade did not help. Command economy coupled with prolonged civil war devastated the economy during the dark days of the military. High tariffs as high as 230 percent on certain luxury consumer goods, and a variety of quantitative restrictions including quotas, direct prohibition, strict licensing and foreign exchange rationing constrained the country's import trade. With the military's newly found trading partner in the 1980's, Ethiopia's sent about 5 percent of its total exports to the Soviet Union, while about l6 percent of its imports came from that country. Overall exports declined to 8 percent of GDP, and imports rose to 21 percent. Imports included equipment and machinery, intermediate goods for agriculture and industry such as fertilizer and fuel. Under the military, Ethiopia suffered from chronic droughts and famines and became a net importer of food in the 1980's. The military government ran continuous trade deficits and the country's international trade status was dismal with massive imports and tiny exports.

Fast forward to today, Ethiopia has opened its economy to international trade, though it continues to experience significant deficit in its foreign trade balance. It continues to import most of its machinery and equipment, and its intermediate goods for agriculture and industry. As of 2017, it exports annually a little over USD six billion of goods and services to its trading partners while importing nearly USD 20 billion worth of products and services from them. International trade accounts to 31.5 percent of GDP.

Presently, Ethiopia's leading export goods include coffee, dried vegetables, gold, meat, leather and leather products. More than 40 percent of its exports go to its major export trading partners, United States, Saudi Arabia, Germany Switzerland, and China. Nearly 60 percent of its goods and services are sold to the rest of the world. Ethiopia's major imports are petroleum, motor vehicles, medical machinery and equipment, palm oil, and chemical fertilizers. It also buys most of the consumer goods such as cell phones, computers, radios, televisions, pharmaceuticals, and textiles that have significant local demand. It buys these goods from its major import trading partners, China, United States, India, Kuwait, Japan, and the rest of the world. Nowa days, nearly a third of Ethiopia's imports come from China.

2.1.4. Terms and Definitions

According to the International Tax Compact (2010), the subject of tax evasion and avoidance embraces many dimensions and problems. As there exists no clear-cut distinction between tax evasion and tax avoidance, one firstly needs to define which practices can be considered as violation or abuse of tax codes. To create a level playing field when discussing these issues, the following terms and definitions are helpful.

Tax evasion in general refers to illegal practices to escape from taxation. To this end, taxable income, profits liable to tax or other taxable activities are concealed, the amount and/or the source of income are misrepresented, or tax reducing factors such as deductions, exemptions or credits are deliberately overstated (See Alm and Vazquez, 2001 and Chiumya, 2006). Tax evasion can occur as an isolated incident within activities that are – in other aspects – legal. Or tax evasion occurs in the informal economy where the whole activity takes place in an informal manner – this means the business is not only evading tax payments but is also not registered as formal enterprise at all.

Tax avoidance, in contrast, takes place within the legal context of the tax system that is individuals or firms take advantage of the tax code and exploit "loopholes", i.e. engage in activities that are legal but run counter to the purpose of the tax law. Usually, tax avoidance encompasses special activities with the sole purpose to reduce tax liabilities. An example for tax

avoidance is strategic tax planning where financial affairs are arranged such in order to minimize tax liabilities by e.g. using tax deductions and taking advantage of tax credits.

The taxpayer is not obliged to follow the spirit or the underlying purpose of the tax code but only the letter of the law. Yet in practice, this boundary often is less than clear. Sometimes, the loopholes which are explored via tax planning are clear and unambiguous. Often, they are not. Hence, tax avoidance often takes place at the margins of the tax code, in areas where the code is ambiguous and in need of interpretation. In areas where the tax administration decides with a certain degree of discretionary authority, the distinction between avoidance and evasion is blurred. This becomes even more relevant if countries change the tax regulations concerning tax loopholes retroactively.

In many instances, the distinction between tax avoidance and tax evasion is clear only from the exposit perspective, ultimately a post-court perspective. For this reason, tax evasion and tax avoidance are usually treated jointly, despite their differences.

The tax gap – or tax revenue gap is defined as the difference between the tax revenue which would be raised under hypothetical, perfect enforcement of taxes and the actual tax revenue. A policy intended to fight tax evasion and avoidance is a policy to narrow the tax gap. Trying to close the tax gap, though, is a pointless task – even if perfect enforcement was possible (which is not the case) – since the necessary administrative cost to detect each and every tax evader would be far higher than the additional tax revenues generated.

Measuring the tax gap is a challenging task. Several countries are working on calculations of their national tax gap and publish tax gap estimates. However, these estimates serve only as proxies and are not comparable because estimations techniques and used data differ widely. The tax gap sometimes is used as an indicator for the level of tax evasion and avoidance. Yet, since there are several factors affecting the size of the tax gap e.g. the capacity of tax administrations to determine and collect taxes, one should be careful when using the tax gap as an estimate for tax evasion and avoidance.

The exchange Rates

Exchange rates measure the growth of the economy. Most countries including Ethiopia use the US dollar as the main standard converter of wealth of a given country. Whenever there is increase in the dollar, the shilling loses its value resulting to depreciation of a shilling. The country whose currency is losing its value against a dollar stands a chance of losing tax revenue collected. As current study shows the relationship between tax revenue and exchange rate is negatively related and statically significant. This also indicated by Omolo (2012), Who examined the effect of exchange rate on tax revenue collection; if the exchange rates increases the effect on tax revenue collected from exports reduce because when exporting we pay high on purchase and sell them at lower prices making losses that reduces our tax level. Majority of exporters tend to reduce exports at such time until the dollar gain the value. The regression result revealed that holding other factors constant, when inflation increase by 1%, tax revenue will decrease by 3001.194. Considering the analysis this variable is reliable for the growth of tax revenue and growth of economy at large. Morley (1992) analyzed the effect of real exchange rates on output for twenty-eight devaluation experiences in developing countries using a regression framework. After the introduction of controls for factors that could simultaneously induce devaluation and reduce output including terms of trade, import growth, the money supply, and the fiscal balance, he observed that depreciation of the level of the real exchange rate reduced the output. In the study of London (1989) to examined money supply and exchange rate, in the inflationary process of twenty three Africa countries. The application of pure monetarist model on supply, expected inflation and real income were significant determinants of inflation for the period between 1974 and 1985. Exchange rate was later included as one of the explanatory variables in pure monetarist model. The result shows that exchange rate movement had remarkable influence on the tax revenue collection in international trade.

International and national perspective tax evasion and avoidance

The international dimension of tax evasion and avoidance can be divided into two stylized strands: On the one side, one can find – legal or natural – persons taking advantage of differences in tax laws or rates and the resulting tax liabilities between countries resulting in attempts to shift tax liabilities to low-tax countries. This starts with efforts to reduce tax payments in a private

environment, e.g. tax-induced cross-border shopping and tank-tourism, and ends with the flight of financial capital to low tax destinations or tax havens. Tax Mitigation and tax planning are synonyms for tax avoidance.

On the other side, the international dimension of tax evasion and avoidance covers all kinds of tax evasion and avoidance activities which occur as a result of international trade, the international division of labor, and international competition for foreign investment. In this field, one can find multinational enterprises' (MNE) tax-driven shifting of profits, tax evasion and avoidance against the background of investment incentives and special enterprise zones, as well as various kinds of VAT and tariff fraud accompanying international trade in goods and services.

Besides the international perspective there also exists a national dimension. This relates to all incidents in which individuals or firms evade or Mitigate taxes within their country of residence while no transactions with companies or individuals abroad are involved. The national perspective comprises incomes and revenues generated in the domestic informal economy, income not reported by a legal or natural person and other means of 'getting around' solely domestic tax liabilities.

Understanding taxpayer behavior is crucial for policy makers to develop strategies to overcome problems of noncompliance among individual taxpayers' and prevent evasion & avoidance. Two most commonly known models are the Becker (1986) and Fisher (1992) which have contributed to taxation literature in understanding taxpayer behavior. Chan, Troutman and O'Bryan (2000) have incorporated important constructs namely demographics, noncompliance opportunity, attitudes and perceptions and the tax structure / system, in the Fisher (1992) model.

Many other researchers described that tax compliance is operationally considered as complying with tax laws in the act of true reporting of the tax base, correct computation of the tax liabilities, timely filing of tax returns and timely payment of the amount due as tax (Chatopadhyay and DasGupta, 2002; Franzoni, 2000: cited in Alabede et al., 2011). Any behavior by the taxpayer contrary to the foregoing statement is noncompliant. Noncompliance with tax laws comes in different forms. It may be intentional noncompliance in which the taxpayer deliberately undermines the tax rules and regulations in order to have personal gains. The second is in the

form of unintentional noncompliance that may be as result of ignorance, oversight or mistake in applying tax laws. Any noncompliance act committed by taxpayer that results to non-declaration / underreporting/ of taxable income leading to non- payment or underpayment of tax is regarded as Tax evasion & Avoidance (Alabed et al., 2011).

Tax structure is a major determinant of tax compliance behavior. Thus, the factors that determine the effectiveness of the tax system/structure of any country includes such as probability of detection, penalty, tax rate and complexity of tax system (Fischer et al., 1992). Taxpayers committing noncompliant act may be detected through the process of tax audit and investigation. That is why the primary aim of tax audit is to detect taxpayers not complying with the submission of income tax returns and the payment of income tax (Jackson and Milron, 1986).

Researchers (e.g., Jackson and Milliron, 1986; Hanno and Violette, 1996) have studied the influence of demographic variables such as age and gender on behavior of taxpayers. Vogel (1974), Fallan (1999), and Christen, Weihrich, and Gerbing (1994) also explored other variables on noncompliance opportunities such as level of income, occupations status and education levels. Furthermore, an individual's attitude towards the tax system may predict his tax compliance behavior. Theoretically, Ajzen (1991) claimed that attitude is an indication of behavior. Attitude towards an event, object, function or person may be favorable or unfavorable. Kirchler, Hoelzl and Wahl (2008) stated that a taxpayer with a favorable attitude towards Tax evasion &Avoidance is expected to be less compliant and equally a taxpayer who has an unfavorable attitude is likely to be more compliant.

Taxpayers may also choose to evade taxes and pay tax on their declared income. When enforcement becomes stricter, voters have two ways to react: by changing evasion and by changing the tax rate. For given tax rate, taxpayers would evade less. However, the equilibrium tax rate will change as well. If richer individuals evade particularly large amounts, stricter enforcement puts a larger burden on them. Hence, lower income voters may prefer higher taxes since the tax system becomes more progressive. In this case, while stricter enforcement in itself reduces evasion but the effects of the increased tax rate (and transfer) may offset this effect, since higher taxes and transfers would make evasion more attractive (Borck, 2004).

Despite the many studies as discussed above, much work remains to be done if we would like to develop fully understanding of this intrinsically complex subject and the means of promoting tax compliance. Many researchers such as Alabede et al. (2011), Fischer (1992) and Chau and Leung (2009) suggested that extant literature on the compliance including both analytical and empirical studies mainly focused on individual noncompliance. There is little or no research on corporate tax noncompliance. Greater attention should be paid to the complex corporate noncompliance.

2.1.5. Determinants of Tax evasion & Avoidance

The general framework to be adopted for the literature review of Determinants of Tax evasion & Avoidance is the one given by Orviska and Hudson (2002) as depicted below. The Determinants are generally classified as Tax noncompliance opportunities such as income level, opportunities of reward or cost and law abidance determine tax evasion, tax system/structure such probability of detection or audit and penalties determine tax evasion, moral attitudes to Tax evasion & Avoidance and local knowledge of evasion influence tax payers to be non-compliance or to evade tax and demographic variables such as age, gender, marital status and education and point out the influence on Tax evasion & Avoidance of tax payers in the study area.

- ***Demographic Variable***

The relationship between demographic variables and tax compliance has long been of interest (Tittle, 1980). Three major personal characteristics for which there is evidence of a relationship are age, gender and education (Jackson and Milliron, 1986). The Fischer model suggests that demographic variables indirectly affect taxpayer compliance by their impacts on noncompliance opportunities and attitudes and perceptions (Chau and Leung, 2009).

Age:

A common demographic variable is the taxpayers' age. A positive link between age and taxpayer compliance is reported (Jackson and Miliron, 1986). Noncompliance is significantly less common and of lower magnitude among householders in which either the head or the head's spouse is over age 65 (Andreoni et al., 1998: cited in chau and leung, 2009). In general,

young taxpayers are more willing to take risks and are less sensitive to sanctions (chau and leung, 2009).

Gender

Early research (Tittle, 1980: cited in Jackson and Milliron, 1986) testing the tax compliance level of males versus females reports that females are more likely to tax compliance. Traditionally, females have been identified with conforming roles, moral restraints and more conservative life pattern (Jackson and Milliron, 1986). All these attributes may promote higher tax compliance. Experimental study conducted by Baldry (1987) Also finds that females tend to tax compliance by more than males do. Jackson and Jaouen (1989) also revealed a significant gender difference by treatment group from a pool of potential jurors. However, the study by Houston and Tran (2001) indicates a higher proportion of Tax evasion & Avoidance comIMtted by women than men.

Education

Education, as a demographic variable relates to the taxpayers' ability to comprehend and comply or not comply with the tax laws (Jackson and Milliron, 1986). Two aspects of education have been distinguished: "the general degree of fiscal knowledge and the degree of knowledge involving evasion opportunities". This knowledge is considered to be important for attitudes towards tax compliance (chau and leung, 2009). Chan et al. (2000) also reveal that higher education is directly linked to an increased likelihood of tax compliance.

- ***Non-compliance opportunity***

In the Fischer model, noncompliance opportunity can affect taxpayer compliance directly through income level, income source and occupation and indirectly through attitudes and perceptions (chau and leung, 2009).

Income

According to Andreoni et al. (1998) most of the theoretical models indicate that as income increases, tax compliance should decrease. Studies have proved this assertion (Chau and Leung,

2009; Ritsema and Thomas, 2003). Houston and Tran (2001) also reveal the respondents in the lower income group tend to have a lower proportion of tax compliance by under-reporting income and by over-claiming expenses than their counterparts in the higher income group.

Law Abidance

Tyler (1990) argues that citizens may comply with the law because they view the legal authority as having a legitimate right to dictate their behavior. He specifically distinguishes between this and an 'internalized obligation' derived from people's desire to behave in a way consistent with their own sense of 'personal morality'. This latter concept appears closely related to civic duty. Tyler briefly mentions Tax evasion &Avoidance as an area where these concepts may be relevant. However, he goes into more detail when discussing illegal use of drugs, where he argues that law abidance, personal morality (equivalent, as we have said, to civic duty), the fear of punishment and the fear of friends' disapproval are the major Determinants of behavior.

According to legal positivists, laws are norms or rules determining how a person ought to conduct themselves in the community (MacCormick, 1991).

This normative view of law sees advantages to individuals in obeying laws, although it does leave the door open to moral objections to such obedience. It also recognizes that not everybody in society will be bound by the desire of the majority, and hence, sanctions must be employed against the minority of law breakers. For the majority, however, a tendency to obey the law must be a significant factor in determining their view on whether to comply with any law including those in the domain of public law such as tax compliance (Marta, and John, 2002).

Penalty

Doran (2009) stated that tax penalties remain important for the following reasons. For the norm model assumes that certain taxpayers will not comply with tax obligations and those taxpayers must be deterred by the threat of legal sanctions and, for, taxpayers who complied must be assured that non-compliant taxpayers will be sanctioned. Similarly, Chau and Leung (2009) argued that tax penalty is an important factor affecting Tax evasion & Avoidance and that the idea is that the fear of penalty will prohibit the noncompliance tendency.

Costs and benefits of Tax evasion & Avoidance

As Torgler and Schneider (2005) assumed that taxpayers are rational economic evaders who likely would assess the costs or benefits of evasion.

They would attempt to minimize their tax liability, for instance, by intentionally under reporting their income and would enjoy tax savings if they were not detected by the tax authorities. But they would be willing to pay more, adding a penalty, if they were caught.

- ***Attitudes and Perception***

The Fischer suggests two major considerations for altering taxpayers' attitudes and perceptions to tax compliance are the fairness of the tax system and peer influence (Chau and Leung, 2009). Thus, individual evaluates an event or object positively or negatively and positive and negative evaluation is the main dominant characteristic of an individual's attitude (Alabede et al,2011). This also supported by Kirchler et al. (2008) who suggested that taxpayer who has favorable attitude towards Tax evasion & Avoidance is expected to be less compliant and equally taxpayer with unfavorable attitude is likely to be more compliant.

With regard to distributive justice, comparisons are made on the basis of individuals, groups and societal level and at individual level; taxpayers will be interested in the fairness of his tax burden, if it is perceived to be too high compare to other individuals' tax burden, his rate of compliance is likely to decrease. At the group level, the taxpayers are interested on the fairness of treating their groups compare to other groups, when a group perceived that it is not fairly treated in respect to tax burden in relation to other groups that may lead tax noncompliance in the group (Alabede et al, 2011). Attitudes represent the positive and negative evaluations that an individual holds of objects. It is assumed that attitudes encourage individuals to act according to them. Thus, a taxpayer with positive attitudes toward Tax evasion & Avoidance is expected to be less compliant than a taxpayer having negative attitudes (Kicheler et al., 2008)

- ***Tax system/structure***

It is widely acknowledged that the extent of tax compliance in many developing countries has been decreasing through time. The underdeveloped tax system/structure is one of the major causes for this decreasing trend. In the Fischer Model, the effectiveness of tax system is affected by compleEXty of tax system, penalties and tax rates and probability of detection or caught (Chau and Leung, 2009).

The other 'direct' factors impacting on Tax evasion &Avoidance are the opportunities for evasion, which determine the costs and the potential gains. In the empirical study that follows, the opportunities for and costs of tax evasion, the probability of being caught and any fine, are all constant across individuals. Socio-economic variables impact on the fear of moral censure and will proxy this variable in the empirical analysis (Mart, and John, 2002). In general, higher audit probabilities and strict penalties encourage tax compliance. Probability of detection refers to the likelihood that the tax authorities may discover an individual's noncompliance and seek to remedy the evasion (Chau and Leung, 2009).

Audit rates and the thoroughness of the audits could encourage taxpayers to be more careful in completing their tax returns, declare all income and claim the correct deductions to ascertain their tax liability. In the other hand, taxpayers who have never been audited might be tempted to under report their actual income and claim false deductions (Palil and Mustapha, 2011).

Another important factor affecting tax compliance is the relationship between tax compliance and the strictness of sanctions. The issue is that fear of penalties prohibits tax noncompliance behavior. Establishing an effective system to penalize tax evaders is an important measure to encourage tax compliance. Taxpayers will be more seem to comply if noncompliance may result in strict penalties (Chau and Leung 2009). This also supported According to the theoretical work conducted by Allingham and Sandmo (1972), tax compliance can be increased by increasing the penalties levied on tax evasions which are already discovered. To be effective, penalties must be applied speedily and forcefully.

2.1.6. How to Measure Tax Evasion & Avoidance

The Taxpayer compliance Measurement program data consist of line–by–line information about what the taxpayer reported and what the examiner concluded was correct. The primary purpose of the TCMP was to improve the process for selecting returns for operational audits. Rather than to estimate the tax gap Measuring a behavior that individuals attempt to hide is inherently one of the more challenging problems faced by social scientists. Social scientists therefore rely on both direct and indirect approaches for measuring what is commonly referred to as the ‘‘Underground economy.’’ Joel Slemrod (2007). Andreoni, Erard, Feinstein(1998, p.836) claim that the most reliable information about noncompliance is based on actual tax return information that has been thoroughly examined by auditors as part of the IRS Taxpayer Compliance Measurement program (TCMP) which attempts to measure ‘’ unreported income’’ and the national ‘tax gap’.

Another direct approach is based on survey evidence, in which individuals are asked about their evasion behavior. Still another direct approach uses tax amnesty data, in which declarations of income by amnesty participants are used as an exact measure of evasion. More “indirect” methods look for traces of evasion behavior that are left in various indicators that can be identified, so that evasion is not measured directly but rather indirectly via these measureable traces. There are several indicators that have often been used.

- ***One Approach***

Another indirect approach looks for traces of evasion in transactions financed by currency, on the assumption that the “true” level of economic activity can be estimated via a Fisherian relationship between money and its velocity. The gap between this predicted level of economic activity and the official national accounts level gives a measure of the so-called “shadow economy”, which can then used as a proxy for the amount of tax evasion. A related and more commonly used method is the currency demand approach, which estimates the demand for currency as a function of conventional factors (e.g., income, interest rates) and also as a function of factors that are assumed to motivate individuals to engage in evasion activities (e.g., the direct and indirect tax burden, government regulation, the compleEXty of the tax system). Any

"excess" in currency demand, or the amount unexplained by the explanatory variables, is then attributed to the shadow economy and, by extension, the amount of tax evasion.

There is also evidence from the USA that evasion varies between occupations, with car dealers, stores and restaurants evading the most (understating taxes by 39%) while those in finance, insurance and agriculture the lowest evaders (Andreoni et al., 1998). The first of these challenges, tax avoidance and evasion, is the dominant theme of Global Tax Fairness and The Hidden Wealth of Nations. These are problems faced by all countries, but as Zucman's data show, their impact on developing countries is disproportionate: he estimates that 30 percent of Africans' financial wealth is held offshore, and 22 percent of Latin Americans', while the equivalent figures for Europe and the US are 10 and 4 percent respectively (HWN p53). Developing countries also face particular challenges: on the political side, they lack the power to coerce reforms out of states whose tax systems undermine their own, and must piggy-back on efforts made by the G20 and OECD; on the technical side, capacity constraints make it difficult to implement the de facto global tax rules that are produced by these larger economies' clubs. Tax evasion, which involves breaking the law and for which the focus is largely on wealthier individuals, is addressed at international level through information exchange. Jurisdictions can supply each other with data on the income earned by each other's' citizens abroad, which may otherwise be hidden from their home tax authority. The challenge is to force tax havens, which deliberately use secrecy to attract illicit wealth, into participation in an information exchange regime that will jeopardize their financial service industries.

Since 2008, the G-20 and OECD have been ratcheting up pressure on tax havens, a process simultaneously disrupted and catalyzed by the USA's unilateral decision to use brute economic coercion to force foreign banks into automatic disclosure. Here we find interesting divergence within and between the books. ItaiGrinberg, who has a chapter in both edited volumes, argues that the USA 'catalysed an evolutionary moment' that he sees as 'a success story in global tax co-operation' (GTG p170). The USA here is a benevolent hegemon, using its financial market power to create a public good of information exchange from which others, including developing countries, can benefit. Lukas Hakelberg disagrees, pointing out that while the US Congress demands information from others, it has withheld consent for legislation that would perIMt its

own Internal Revenue Service to reciprocate. As a result, the USA measures 'advantage the US at the expense of less powerful jurisdictions with secrecy provisions' (GTG p125). In The Hidden Wealth of Nations, Zucman argues, somewhere between these two poles, that this new information exchange regime is a stepping stone towards something more comprehensive.

- ***Tax Competition***

The second problem for developing countries in international tax, tax competition, is the organizing principle behind Global Tax Governance (whose introduction goes as far as to label it 'the problem') and Catching Capital. Countries compete to attract mobile capital by offering lower tax rates, tax incentives, and other advantageous rules such as the secrecy that enables tax evasion. Broadly speaking, tax competition is a problem faced by all countries, since all are looking to attract capital. But because it is usually understood as a race to the bottom to attract inward investment, it is an especially pernicious problem for developing countries that are overwhelmingly capital importers. 'Anyone who worries about the income gap between rich countries and poor countries has to be troubled by tax competition,' argues Dietsch (CC p51).

2.2. Empirical Literature

2.2.1. Empirical Evidences in Case of Global Studies

Indirect and Unintended Effects of Trade Taxes

Trade taxes can generate indirect (or unintended) effects on economic activity. Trade taxes, for instance, can be the source of smuggling, and evasion of taxes can occur either for imports or exports (see Sheikh (1974), Pitt (1981, 1984)).

Smuggling represents socially wasteful activity in which real resources are used to avoid payment of the tax; in effect, tariff revenues that would otherwise accrue to the government are now dissipated in real resources devoted to smuggling. Smuggling, in turn, can coexist with corruption, where again real resources are devoted to evasion of taxes, either by bribing officials or by mis-invoicing and other related schemes. Relative to smuggling, bribery can

be a more efficient outcome insofar as tariff revenues are transferred as payment to officials, and benefits accrue to bribers in the form of profits from resale of lower cost imports.

Trade taxes can also impact on the foreign exchange market. Tariffs restrict imports, and with unchanged monetary policy will have either positive or negative effects on exchange rates depending on elasticize of import demand. If there are fixed exchange rates and rationed foreign exchange with a surrender requirement for exporters, there will be a premium on foreign exchange on parallel (or black) markets. A tariff serves to reduce this premium, as the premium itself serves as a surrogate tariff. A 10% tariff, for instance, will serve to reduce the foreign exchange premium by 10 percentage points.

Central to the outcome in this area is what form of enforcement device is used by government agencies to control such practices as smuggling and at what economic cost. Enforcement is often taken in the literature to be based on two separate elements; one is the fine charged on bribers and smugglers if caught, and the other is the probability of detection. From a purely efficiency point of view, it is cheapest to use large fines for those caught as the enforcement device and devote smaller amounts of resources to detection. This is, however, typically not done partly because of the risks of incorrect apprehension, with a draconian penalty being exacted on a compliant taxpayer. It also reflects the general philosophical belief that the punishment should fit the crime. For these reasons, then, penalties for evasion of small trade taxes are usually moderate, and hence smuggling and evasion frequently occur in lower income economies with limited administrative infrastructure.

Allingham and Sandmo (1972) and Fedeli (2012)'s theoretical model provides a starting point concerning how traders decide to evade tax, given the prevailing tax rate. It puts tax evasion in a game-theoretical context. Tax evasion often entails tax payers deliberately misrepresenting the true value or quantity of goods traded to the tax authorities in order to reduce their tax liability (Slemrod, 2007). In trade, tax evasion includes misstatement of imports or exports in a bid to avoid tax liability by traders. Buehn and Eichler (2011) note that an act closely linked to tax evasion is trade mis-invoicing. Tax evasion is illegal and punishable by law, which forces traders to be involved in the act secretly and makes it difficult to detect. The decision to evade tax is affected by the probability of being detected

by the authorities, but also the magnitude of the penalty as well as the wealth effect (Buehn and Eichler, 2011; Slemrod and Yitzhaki, 2002). If there is a low probability of detection that is compounded by a higher income return from evading tax, importers and exporters put a huge effort into evading tax. In a related tax-evasion model, Slemrod and Yitzhaki (2002) also emphasize that if the probability of detection is high and the punishment is punitive enough, tax evasion will most likely decrease. They further note that relative to income, evasion may rise, fall or remain the same depending on whether relative risk aversion is decreasing, rising or remaining constant. This suggests that the degree of risk aversion in conjunction with income also plays a pivotal role in determining tax evasion. Risk-averse individuals are less likely to evade tax as compared to risk takers. Buehn and Eichler (2011) designed a conceptual framework analysis that reflect how importers decide to evade tax. They suggest that importers in the domestic market, in this case Zimbabwe, import goods amounting to M and decide how much to report; that is, M-SM, where SM is the value of unreported imports. If the importer decides to evade tax by underreporting, then unreported imports will be Sm> 0, whereas if the importer decides to evade tax by over-reporting, then unreported imports will be Sm< 0. Empirically, most of the existing studies focus on tax evasion and tax revenue for developing countries during normal economic conditions (see Fisman et al., 2007; Fisman and Wei, 2007; Pommerehne and Weck-Hannemann, 1996; Van Dunem and Arndt, 2009). Existing studies have concentrated on the impact of trade liberalization on tax evasion in developing countries (Arndt and Tarp, 2009). A widely accepted notion is that higher tax rates result in increasing cases of tax evasion (Fisman and Wei, 2007; Levin and Widell, 2014; Marrelli, 1984; Torgler and Schneider, 2007; VanDunem and Arndt, 2009).Van Dunem and Arndt's (2009) study on Mozambique reports that a 1% increase in taxes leads to a 1.4% increase in tax evasion. Similar results are concluded by Levin and Widell (2014) in a study in Tanzania, Kenya and the UK. Tax evasion cases are found to be prevalent in Tanzania compared to Kenya and the UK. The study …nds that under-reporting and tax evasion in Tanzania have been prevalent between the years 2000 and 2004, with coe¢cients of 2.6 and 3.5 respectively. Recent studies concerning Iran Maddah and Nematollahi, 2013), Brazil(Kume et al., 2011) and China (Fisman and Wei, 2001) reached similar conclusions. Higher tax rates increase chances of tax

evasion. In Iran, a total of 27 917 goods showed a significant positive relationship between tax rates and tax evasion on imports from 12 major trading partners. In Brazil, evidence of under-reporting of imports are concluded with an elastic response of 1% increase in tax rates leading to a 3.2% increase in tax evasion of imported goods from trading partners. Similar conclusions were arrived at in China, where a 1% change in tax rates resulted in a 3% increase in tax evasion of goods imported from Hong Kong. Javorcik and Narciso (2008) conclude that tax evasion is more common on differentiated than homogenous goods in Germany. More specifically, a 1% increase in tari¤ rates in Germany led to a 0.4% and 1.7% increase in tax evasion of homogenous and differentiated goods respectively (Javorcik and Narciso, 2008).

Incentives for misreporting at the Chinese border

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One of the key incentives behind the under-reporting of exports at Chinese border is export VAT avoidance. China's tax revenue relies primarily on indirect taxes, such as the value-added tax. The VAT accounted for between 36 and 50 percent of China's government revenue in 2006.7 China's VAT has several peculiar features distinguishing it from the VAT used in other countries. China's VAT is both destination-based (all goods sold in the country are taxed; the VAT is rebated on exports of domestically-produced goods) and production-based (no deduction is allowed for capital goods purchased during the current period). The destination basis of the VAT creates a difference between the tax treatment of domestic sales and trade. Moreover, imports are usually duty-free if they are used for producing exports. The practice of export tax rebates is widespread, and is permitted under the GATT/WTO, as long as the rebate rates are no higher than the actual collection rates.

The variation in effective VAT rates arises from modifications to the destination and production basis. Unlike the European Union, where the VAT is on a pure destination basis and

China Statistical Yearbook 2008 and authors' calculations. The range is due to the category "Consumption Tax and Value-Added Tax on Imports," not broken out separately and accounting for 14 percent of revenues. The category "Value-Added Tax," accounting for 36 percent of revenues, likely refers to VAT on Chinese domestic production. (See USITC (1998) for a contrast of the destination basis with the origin basis, and Lin (2004) for production basis vs. revenue or consumption basis. VAT rebates on exports are fully credited, in China the destination basis of the VAT is frequently modified by reduction or elimination of VAT rebates on exports to pursue a variety of policy goals, including stabilization, reducing trade frictions, and environmental policy. The production basis, which is not common worldwide, was adopted originally in order to maximize tax revenue, despite the distortions caused by charging higher taxes to capital-intensive sectors. The tax contains a number of other adjustments and variations which add to its complexity.

As documented by Cui (2003), China implemented the export tax rebate policy in 1985 and established the "full refund" principle in 1988. China implemented a major tax reform in 1994 by replacing the old industrial and commercial standard tax (gong shang tong yi shui) with a new value-added tax with base rates at 13 percent and 17 percent and zero rate on exports. The export rebates increased dramatically after 1994 and the central government was forced to reduce the rebate rates twice in 1995 and 1996 due to budget shortfalls. To counter the negative impact of the 1997 Asian financial crisis and promote exports, China increased the export tax rebates for various products nine times from 1998 to 1999. Since 2003, due to rapidly rising exports and increasing pressure for appreciation of the Renminbi, Chinese government has reduced the export VAT refund rates on many products (see Circular No. 222, 2003). For example, rebates on certain scarce natural resources and ores were reduced or completely eliminated. In 2008, a new round of rebates cut on more than one third of the product categories in the customs tariff code was proposed by Chinese government (see Circular No. 90, 2008). Rebates were eliminated on those products that consume high amounts of energy and resources or cause high levels of pollution in production, and lowered for certain products that tend to cause trade frictions such as textiles, toys, paper and furniture. Over 2002-2008, the average statutory VAT rate is about 16 percent, and the rebate rates range from 0 percent to 17 percent with an average around 12 percent and a standard deviation around 4 percent. Thus the net VAT (VAT minus the rebate)

has a substantial amount of cross-product and time series variation, which we exploit in our econometric analysis.

The VAT rebate policy on exports in China is complicated and has been changing constantly over time. However, the main method of computing the rebate is rather stable. "Exemption, Credit and Refund" (ECR hereinafter) is the most popular method, especially in the recent years.

As specified in Circular No. 7 (2002), almost all manufacturers use the ECR method. According to Circular No. 7 (2002), the official formula used to calculate VAT payable for general trade and processing exports with imported materials is as follows:

VAT Payable = Output VAT - (Input VAT - NCNR) (7)

in which Output VAT = Domestic sales amount * VAT levy rate (there is no output VAT on exports), Input VAT is the VAT paid on domestically acquired inputs, and NCNR (the non-creditable and nonrefundable amount) is defined as

NCNR = (X-BIM)*(t-r) (8)

in which X denotes the value of exports, BIM represents bonded (or tax-free) imported materials; t is VAT levy rate, and r is VAT rebate rate.

Thus, for the case of exports, the total VAT bill reduces to NCNR – Input VAT.

The above formula implies that exporters may have incentive to under-report export (X) if (t-r) is positive, which is true for the partial rebate regime in China.

The higher is (t-r), the stronger the incentive for exporters to under-report to the Chinese customs authorities.

Therefore, we predict a positive relationship between the China-ETHIOPIA trade discrepancy and (t-r), the net VAT rate. By a similar argument, there should be a positive relationship between the discrepancy and the Chinese corporate income tax rate, since increased export revenues imply increased total revenues and increased profits. We expect that the VAT avoidance incentive may be stronger for normal exporters than processing exporters. First,

processing exporters are also less likely to under-report than normal exporters in general due to stricter enforcement on processing trade at Chinese border. For example, Chinese Customs usually maintain the records for processing trade for at least five years. Second, processing exporters are also less likely to under-report than normal exporters to avoid VAT in particular due to the following reasons. According to the formula (8), processing traders can reduce VAT liability through either understating exports or overstating BIM, while normal traders can only understate exports. Not all exporters are eligible for duty-free treatment of imported inputs. Only exports which qualify for the processing trade have BIM > 0, but "Normal" exporters usually have little BIM and have to pay duty on imports. In a legally allowable tax filing, processing exporters must have exports exceeding the value of BIM. Otherwise the authorities will detect a problem and the duty exemption for the imports may be revoked. In the case of normal exports, there is no duty exemption for imported intermediates, and thus their value does not create a lower bound for under-reporting of exports. Moreover, the ECR method strictly speaking applies only for both normal exports and exporters in processing trade with imported materials (type II). Processing exports with supplied materials (type I), in which foreign firms own the bonded imports and the exports produced from them, use the "No collection and no refund" method. This means no VAT on the value-added part of type I processing exports so there is no refund on the domestically purchased inputs. Thus, there is no benefit for misreporting exports associated with misreporting type 1 processing exports. However, since type I processing exports only account for about 10 percent of China's total exports in recent years, the VAT formula discussed in the text describes the most relevant case. For above reasons, normal traders may understate exports more heavily than processing trade in general and to avoid VAT in particular.

We also expect larger statistical discrepancy for products with higher domestic firm shares (including SOEs, collective and private firms) than for FIEs. There are two possible interpretations. First, since domestic firms are subject to more strict capital controls, the incentive to under-report exports in order to engage in unrecorded capital export (money laundering) may be greater from them. Second, domestic traders may be more sophisticated about exploiting loopholes in the VAT rebate procedure, or may have closer relationships with Chinese Customs which may reduce the severity of penalties they receive if their misreporting is detected. Besides VAT avoidance, other factors may also contribute to the under-reporting

behaviors at the Chinese border. For example, misreporting of trade data is also one of several methods of moving capital into and out of a country. Another factor behind under-reporting of exports at Chinese border might be smuggling. The smuggling of cultural property and antiques has been studied by Fisman and Wei (2008). We do not intend to address this issue because it can be better dealt with in a multiple country context.

Money laundering (evasion of capital controls) and misreporting at Chinese border

Misreporting of trade data is also one of several methods of moving capital into and out of a country. If the true value of exports is higher than that reported to the authorities (i.e. exports are under-invoiced), the difference can be deposited in an overseas account as a method of unreported capital export. Similarly, **if the true value of exports is lower than that reported to the authorities (exports are over-invoiced), the difference can be used to provide a paper justification for bringing additional capital into the country**. Although there are other methods for concealing capital transactions, such as misstating FDI transactions or the use of underground private banks, a good deal of concealed "hot money" flows into and out of China may take the form of under- and over-invoicing of exports.

Chinese capital controls have taken a variety of forms, varying over time. These include controls on portfolio flows, external debts, banking transactions, and, until recently, outward direct investment. Evidence that the capital controls have been historically binding includes both the fact that the composition of capital inflows into China has been heavily weighted towards less-controlled foreign direct investment inflows (Prasad and Wei, 2005) and the persistence of onshore vs. offshore interest rate spreads, though these have narrowed since the beginning of the current episode of Renminbi appreciation in 2005 (Ma and McCauley, 2007).

Lyungwall and Wall (2007), studying capital flight from China, examine several alternative measures of capital flight, using different measures generated from the balance of payments. These measures are in broad agreement that China has experienced net capital flight since at least 1986, which peaked in approximately 1998 and declined to near zero by 2001-2002. The peak of capital flight coincides with the period of extensive bankruptcies and restructuring of state-owned enterprises.

Incentives for misreporting at the USA border

The transfer pricing literature suggests that there are incentives to under-price **USA** intra firm exports to low tax countries and overprice **USA** intra-firm imports from such countries. Most of these studies exploit the cross-country variation in tax rates. In one estimate, Bernard, Jensen and Schott (2006) estimate that the United States over-reported its imports from China by about $1.72 billion in 2004. Since the average **USA** corporate income tax rate in 2005 was about 35 percent on income subject to tax and about 19 percent on total net income. By contrast, the average tariff rate on **USA** imports was about 1.4 percent. Thus, in almost all cases, incentives favor over-reporting at the **USA** border. However, it is challenging to assign an appropriate corporate income tax rate to different countries import transactions based on the available information.

There can be many factors which affect the attitude of tax payer towards tax compliance and revenue collection. These factors that influence tax compliance and revenue collection are different from one country to another and from one individual to another. According to a study by Ndyamuhaki (2013) on Factors Affecting Revenue Collections in Local Government in Uganda; the crucial factors influencing tax revenue collection include administrative inefficiencies, lack of general sensitization, political interference, corruption, tax evasion, and absence of enough relevant information about taxes, lack of auditing of tax revenue returns and drafts and lack of enough tax education. She concluded that the identified factors are the main factors that influence revenue collection in the Ugandan local government.

- ***Research on the Effect of Taxpayer Education on Voluntary Tax Compliance***

According to Machogu and Amayithe (2013) research on the Effect of Taxpayer Education on Voluntary Tax Compliance at Mwanza City- Tanzania, the level of tax payer education significantly affects the tax compliance and tax revenue collection. In their studies, they concluded that there was a significant positive relationship between the level of tax knowledge and tax compliance. Taxpayer education will provide the necessary tax knowledge to comply with the tax matter and change the perceptions and attitudes towards tax-compliance by creating more positive attitudes.

Effects of government policies and regulations, local authority information, financial and operations management systems, revenue enhancement plans and employee skills on revenue collection.

In another study conducted by Mercy (2013) on Factors Affecting Revenue Collection in Kenyan local authorities narrowed on effects of government policies and regulations, local authority information, financial and operations management systems, revenue enhancement plans and employee skills on revenue collection. The study concluded that the revenue collectors appreciated the role of information technology in ensuring effective revenue collection however the availability and accessibility was a hindrance to effective Local Authority Information Financial and Operations Management Systems (LAIFOMS) implementation. Among others, the study recommended that the effectiveness of the Local Authority Information Financial and Operations Management Systems (LAIFOMS) can be bolstered by increasing the availability of computers and adding more staff to ensure efficiency in revenue collection.

- ***Tax Fairness and Proper Communication of a Tax Authority***

Tax fairness and proper communication of a tax authority to the tax payers can also have positive effect on compliance of tax payers and tax revenue collection. A study by Fadjar O.P. Siahaan (2012) on the Influence of Tax Fairness and Communication on Voluntary Tax Compliance in Indonesia assessed how the compliance of tax payers can be affected by fairness and proper communication by the tax authority.

The research findings showed that tax fairness and trust of tax payers has direct effect on voluntary tax compliance. The result indicates that feeling of unfair tax system increase the tendency to evade. Tax payer need and ability to pay were the most significant variables related to perceptions of a fair tax system. Also, the amount of taxes evaded increase when taxpayers perceived themselves to be victims of fiscal inequity.

- ***Tax Evasion & Avoidance and Socio Economic Characteristics***

Empirical work has also focused on the link between Tax evasion & Avoidance and socio economic characteristics. There is evidence that evasion declines with age, and is more common among men and in households in which the head is married (Clotfelter, 1983; Feinstein, 1991).

Li et al. (2008) discovered that in many countries there are three basic observations that have emerged recently i.e. always ethical, sometimes ethical & never or almost never ethical. They conduct their research on different universities of Hong Kong & U.S where they found that almost every respondent was against to the view that tax evasion is always or almost always ethical. They further found that most explanatory & strongest arguments on tax evasion were that, it is good & ethical to evade tax if government is corrupt; the tax system was unmerited & unreasonable. Whereas the weakest arguments on tax evasion were the cases where there was a selfish objective. They further explored cultural difference in hope of accounting for contradictory perceptions of ethics of tax evasion. They further highlighted that there is need to implement such policies to increase the awareness in people regarding the ethics of tax evasion.

Chaudhry&Munir (2010) indicates that major hurdle in the economic development & one major justification of high budget deficit in Pakistan is Low tax to GDP ratio. They try to figure out the determinants of low tax return in Pakistan by using time-series econometrics methods over the period of 1973-2009. They examine different factors which are responsible for the variation in the tax revenue collection of Pakistan. They found that basic reasons for low tax revenue in Pakistan are narrow taxation, more dependence on agriculture sector, foreign aid low level of literacy. In the end they concluded that Pakistan can generate high tax to GDP ratio by increasing literacy level & by controlling tax evasion & tax exemptions.

Zaidi (2010) said that Pakistan's economy has experienced many ups & down since last sixty years. Government of Pakistan earns less revenue resulting from the influential use of tax evasion, excuse & exemptions. Less than 1.7% of 175 million citizens pay any sort of income tax, &country's tax-GDP ratio is less than 9% (2010). Tax evasion signifies that lesser resources are available for essential social services. Tax reform can increase government's revenue, but rich &powerful people always oppose such reforms.

By gathering large scale data on tax evasion Gerhani (2007) found that it is an undisputable challenge in & itself. In a country which is in transition from a communism to democracy collection of such data was more than difficult.

Rauf&Yasmin (2002) focused on the measurement of underground economy in Pakistan from the period of 1974-2002. The underground economy is estimated by applying the monetary approach. First of all, the currency demand equation is predicted & then they try to find out the size of the underground economy & tax evasion. In the last, an ordinary least square model is use to find out the effects of underground economy on GDP of Pakistan for specific time period. The results shown a great increased in the underground economy from Rs.12 billion in 1974 to Rs. 1085 billion in 2002. The results indicate that presence of such huge underground economy can reduce tax revenue, lower GDP & increase socio-economic crisis. They further suggest that tax audits & heavy punishments can bring down the size of underground economy with all its out-comes.

Suddle& Levi (1989) found that from the mid-1980, Pakistan has observed the appearance of possible „moral panic" which is tax evasion. It is shown by media reports about the genuineness of tax evasion. President of Pakistan while addressing to the Karachi Chambers of Commerce & industry on 1986, he told that tax evasion is more serious crime then theft he further add that the theft can hurt only individuals, but tax evasion hurt whole nation & state.

As per Federal Board of Revenue (FBR), fewer the 0.5% citizens of Pakistan pay income tax. That is almost 750,000 persons out of 180 million people. Other countries who have same per capita income like Pakistan, have 14% of their revenue from tax whereas Pakistan has only 9%. Until Pakistan can't get enough revenue from tax, it will be highly dependable on loans &foreign aid. Currently Pakistan's debt is almost $60 million which shows that almost 60% of Pakistan's federal revenue spent on paying these debts.

- ***Tax incentives and exemptions***

A study by the North-South Institute has identified some common challenges to African countries related to domestic resource mobilization. It found that tax mobilizations remained

weak despite significant reforms mainly due to capital flight, tax evasion and increase in tax exemptions (North- South institute (2010).

Many developing countries, particularly in Sub-Sahara-Africa, offer significant tax exemptions and incentives such as tax holidays, tax credits, reduced income tax rates, accelerated depreciation allowances, concessions in export processing zones, import duty waivers and full repatriation of profits in order to attract foreign investments.

However, some evidences show that tax incentives are not necessarily critical drivers of foreign investment. Studies also claimed myriad of tax exemptions and incentives are resulting in low effective tax revenue mobilizations in Africa. For example, a report by African Development Bank (2010) indicated Tanzania lost US$ 1.23 billion (6percent of GDP), in 2008, through tax exemptions (Kariuki and Kiragu 2011).

While tax incentives may promote economic activities and investments, tax exemptions can complicate tax administration and erode the tax base and hence exemptions need to be kept to minimum.

In addition low level of savings, capital flight, poor local economic governance and weak administrative system and organizational capacities are often mentioned as challenges to enhancing domestic resource mobilization in developing counties.

- ***Tax gap***

Tax gap refers to the difference between actual tax revenues collected and estimated / potential tax revenue based on prevailing characteristics of an economy and income level. A more strict definition identifies the tax gap as "the difference between tax collected and the tax that should be collected; the theoretical liability, which is the tax that would be collected if all individuals and companies complied. This aggregate gap is the sum of individual tax gaps, or components of the aggregate tax gap. There is a considerable agreement among research findings on taxation in developing countries that there is huge potential to increase tax revenue in most low-income countries (Mascagni, et al, 2014). Reasons for tax gap range from policy choices by government

to administrative problems such as tax avoidance and weak administrative systems and capacities.

2.2.2. Studies in Ethiopia

There are some empirical studies conducted on the performance of tax revenue mobilization in Ethiopia. Most of the studies focused on analyzing the impact of the tax reforms undertaken in several periods.

One of the notable researches in this area is a study by Bayu (2015), which analyses tax buoyancy and its determinants in Ethiopia. The findings of the study indicate that direct and domestic indirect tax revenues were non-buoyant both in the short and long run, though foreign trade taxes showed sign of buoyancy in the long run. As for the factors that affect tax buoyancy, the study found out the share of services sector value added, level of import and over all government budget deficits to GDP affected the tax buoyancy positively, whereas the impact of the share of official development assistance to GDP was negative. The impact of the share of industry value added to GDP was positive but not statistically significant. Based on those findings tax revenues are non-buoyant in Ethiopia, emphasizing the need to enhance the efficiency of revenue administration in bringing new customers in to the tax net.

Belew (2001) reviewed tax reform in Ethiopia and found that designing a tax system which enables the government to raise more resources as the economy grows and recommends that the tax policy should focus on taxation of the growing economic sectors, taxation of income, and profit as well as taxation of consumption goods with high elasticizes of demand.

Abdella and Clifford (2010) in their study on the impact of tax reform on the private sector performance in Ethiopia reviewed tax reforms which have been made to the tax system of Ethiopia. The study found that there are, significant discrepancies between the laws and directives and several ambiguities in the proclamations, regulations and directives. Moreover, there is often a considerable time lag between the issuance of tax proclamations and regulations, and the associated implementation directives, which increases risk and uncertainty for businesses.

Asaminew (2010) estimated the size of the informal or underground economy in Ethiopia and its implication on the size of tax evasion. He used a monetary approach to estimate the size of the underground economy. The study suggests that there is a significant amount of economic activity (>36percent of the recorded economy) that is not reported and captured by the official statistics. The amount of tax evasion was estimated to be10 percent of the economy in 2010. This is an important finding with implications on tax policy. He particularly pointed out the implication of the finding on the incentive structure towards the small and medium scale enterprises.

Geda and Shimelis (2005) reviewed tax reforms in Ethiopia and explored the contribution of the tax reforms (structural and institutional) to understand its role of increasing revenue in using incidence analysis. They found that most commodities that are subject to some kind of tax whether excise, import duty or sales tax, turned out to be progressive while commodities such as salt, sugar and kerosene tend to be regressive. In addition the distributional impact of the benefits of freely provided services such as education is examined.

Belew (2001) studied tax reforms in Ethiopia and argued that the low tax to GDP in Ethiopia shows existence of modest tax burden and room for raising more revenue. This may suggest that there is opportunity to increase revenue without affecting savings, investment and productive incentives to the private sector. The tax policy may focus on taxation of the growing sector, income, profits and consumption of goods with high elasticity of demand.

In summary, the literatures suggest the existence of untaxed income due to reasons related to the structure of the economy and administrative inefficiencies. This indicates there is a room to increase tax revenue by improving the tax administrations and enhancing the structural transformation towards industry sector.

ERCA which has a mandated authority for revenue collection and tax administration in Ethiopia has formulated a multi-sector change and tax modernization framework. The Authority has adopted strategic directions and has been actively engaged and committed for its implementation. Registration of tax payers (finger prints) and issuance of tax Identification numbers (PIN), broadening the VAT tax base, improvement in tax administration and trade facilitation were some of the measures taken by ERCA.

As a result, Government has made strong efforts to improve its domestic resource mobilization over the past decade mainly by transforming its tax regime. These efforts have started to pay off as revenue from taxation has reached 83 percent of total domestic resources in 2015. It is also well understood by the government that there is a greater need to maximize domestic resources to finance a number of development projects outlined in the medium term plan at the forefront of declining Official Development Assistance (ODA). The government further envisages for revenue from taxation to increase to 17 percent of GDP by the end of the second Growth and Transformation Plan, 2020 from the current level of 13.4 percent.

It is expected that further enhancing capacity of ERCA would improve fiscal management and strengthen revenue administration as well as assist the government to increase domestic resource mobilization by streamlining the tax policy and strengthening tax administration. Further, improving taxpayer services, lowering the cost of compliance and expediting customs clearance can improve voluntary compliance while lowering cost of doing business in the country. (UNDP: 2013)

- ***Tax Gap Analysis for Ethiopia***

Standard models for tax gap analysis, discussed in the literature review, could not be estimated for Ethiopia because of data limitations. Instead a simple approach is followed to crudely estimate and look at the dynamics of the tax gap in comparison to peer countries. The evolution of the gap between tax to GDP ratio of Ethiopia and other comparable African countries is studied to estimate how far Ethiopia's tax collection is from its potential.

- ***Conceptual Framework***

This section summarizes the framework or the model of the study in terms of variables relationships. The main variables of the study are; Tax rate, exchange rate , openness (trade data discrepancies between the report of import & export which is Gap value or Gap quantities). The variables are considered in the study as independent variables which impact on the amount of tax revenue in Ethiopia.

The main objective of this paper is to

To examine the main reason and trade data discrepancies between import and export trade data between two countries which reported to " WORLD TRADECOM" integrated data analysis system which impact on tax collection of the import export duty which leads to tax evasion & avoidance and also analyze trade data discrepancies between Ethiopia imported goods from china and china exported goods to Ethiopia in relation to tax evasion and avoidance in international trade of Ethiopia.

This situation may explore some of the challenges why tax to GDP ratio remains low despite strong and sustained growth recorded in the past twelve years in Ethiopia .

Conceptual Framework

Independent Variable **Dependent Variable**

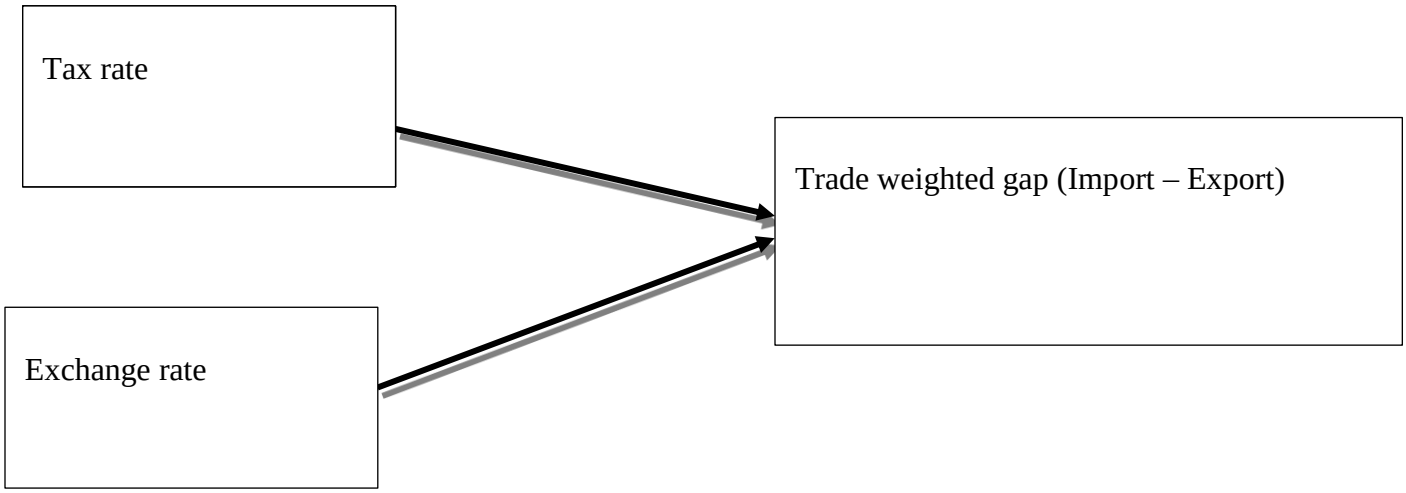


Figure1.1conceptualframework

Source: Developed (constructed) by the researcher from different literature

CHAPTER THREE

3. RESEARCH METHODOLOGY

This chapter involves research design, clearly explaining the data collection procedures and data analysis procedures, model specification and data analysis and interpretation.

3.1. Research Design

This research was based on descriptive explanatory design methods. According to Schindler and Cooper (2003), descriptive methods attempts to define a subject or describe it by creating group problems, people or events profile. Study of descriptive design seeks to explain the factors affect tax collection in Ethiopia. According to Mugenda and Mugenda (2003) descriptive research is the process of collecting data in order to answer questions concerning the current status of the subject in the study. The main advantage of using this design is to enable the researcher to identity the factors and measure their performance. The aim was to gain knowledge on how the tax revenues would be easily collected and increased to enhancement government coffers. Research approaches. To enhance the secondary data type, quantitative research approaches was generally used associated with the positivist/ post positivist paradigm. It usually involves collecting numerical data so that statistical calculations can be made and conclusions drawn (Creswell, 2002).

3.2. Study Population

According to Ngechu (2004), a population is a well-defined or set of people, services, elements, events, group of things or households that are being investigated. The study population in this study is import & export trade data between Ethiopia and china report data from trade flows UN COMTRADE data base (WITS) available at HS6 DIGIT & the amount of import recorded by NBE, MoTE, ERCA & MoFEC variables. Tax revenue for various variables is accumulated and recorded within a financial year which makes it easier to study. The justification for considering these variables population is not scattered and can easily be accessed at a center.

3.3. Data Collection Methods

The main source of data was secondary data from different source; data from trade flows UN COMTRADE data base (WITS) available at HS6 DIGIT product classification of china and Ethiopia and others are, Ministry of Finance and Economic Cooperation , National Bank of Ethiopia, and Ethiopian Revenue and Customs Authority and ministry of trade & industry. In this case, yearly data from 2014-2016 was collected. The yearly data for 3 years period is large enough to cater for the variations in yearly revenues collected over the time. The specific data collected were for the tax collected (dependent variable), tax rate and exchange rate (all independent variables). The reason of selecting secondary data is because the study is based on historical basis.

3.3.1. Data Type and Source

According to Kothari (2004) depending on the sources and techniques ones uses for gathering data it can be divided into primary and secondary data. He go by saying that primary data is data collected by using techniques like interviews, questionnaires and tests. The researcher employed secondary data. On the other hand secondary data refers to documents that have been organized before. The study uses quantitative approaches where by all data were measured in a way that gives meaningful numerical results. This data taken from UN COMTRDE (WITS) Data base

3.4. Description of Variables and Measurements

In the proposed study, instruments were employed to measure two continuous independent variables and one continuous dependent variable. These are outlined below:

3.4.1. Dependent Variable

The dependent Variable of this study would be amount of IMPORT EXPORT data from import & export. Amount tax revenue is defined as the income that is gained by Ethiopian government through taxation.

3.4.2. Independent Variable

To measure the predictor variables of factors which affect international trade & the tax revenue collection of the Ethiopia revenue authority, measures were used as independent variables which would be collected from different studies. The variables namely;

Exchange rate: If the exchange rates increases the effect on tax revenue collected from exports reduce because when exporting we pay high on purchase and sell them at lower prices making losses that reduces our tax level. Majority of exporters tend to reduce exports at such time until the dollar gain the value (Omolo, 2012) and also countries exchange rate availability for importers affect the amount of import commodities.

Tax rate : the rate at which the tax calculated and collected from imports of commodities.

If the ratio of imported trade report by Ethiopia and exported trade by china gives one there is no trade discrepancies and tax evasion but if the ratio of the discrepancies greater than one or less than one there is discrepancies between the countries import and export report trade.

Another measure of statistical discrepancies between Ethiopians reported direct imports from China and China's reported direct exports to the Ethiopia is computed as

GAPit= ln(ethiopaIM)-ln(China EX it)

where IM is ETHIOPIAS reported direct imports from China; EX is China reported direct exports to the ETHIOPIA.; i represents product; and t represents year. where IM is Ethiopia reported direct imports from China; EX is China reported direct exports to the ETHIOPIA.; i represents product; and t represents year. Summary statistics for our measure of ETHIOPIA - China trade data discrepancy are reported in Table 1. the mean discrepancy is positive, reaching its trade-weighted peak in 2015, then starts to decline. Second, the size of the discrepancies varies significantly across HS-6 subheadings, as reflected by the large size of the coefficient of variation (standard error/mean). Finally, despite of the overall positive discrepancy, over 40 percent of the discrepancies at the HS-6 level are actually negative, demonstrating that the factors influencing the discrepancies are very complex and may operate in the opposite

direction. Figure 4 depicts the nonparametric kernel density distribution of GAP for three years: 2014-2016. The distribution has wide range but highly concentrated around zero and becomes less and less dispersed over time. Table 2 shows some descriptive statistics of the covariates (X) over sample years 2014-2016. The trade weighted average of these variables is listed on the second column. The next four columns report some statistics at HS-6 product level. We also calculate the average GAP at HS-6 level for the products with high and low X (compared to the average X) and list them on the last two columns Data at HS-8 level are aggregated to HS-6 using simple averages. Although only three year data are available, the data show clearly that the average discrepancies for products with high net VAT collection rates are significantly higher than the discrepancies for products with low net VAT collection rates (0.50 vs. 0.18), which is consistent with our expectation that higher net VAT leads to under-reporting exports at Chinese border and hence higher GAP. Ethiopia tariffs on merchandise imported from China are computed using USITC internal data, as the ratio of calculated duties collected to customs value of ETHIOPIA imports from China for consumption at the HS-6 level. The data show that in general, ETHIOPIA tariff rates on imports from China are about 4 percent for the average HS-6 subheading, with peaks at around 80 percent. The average discrepancies for products with high tariff rates are much lower than the discrepancies for products with low tariff rates (0.03 vs. 0.41). This implies a negative association between the GAP and ETHIOPIA tariff rates.

3.5. Empirical model

This study employs methodology used by Fisman and Wei (2004) that determines tax evasion as the ratio of the value of China exports to Ethiopia (EX), to the value of Ethiopia import from China (IM). In principle, if there is no tax evasion, the numerator and denominator value should be the same; EX/ IM = 1. If in the presence of tax evasion Or avoidance on the Ethiopian side observed ; EX /IM >1. This shows that the study is concerned with exports that are recorded in China as going to Ethiopia that fail to be recorded in Ethiopia as imports or imports recorded by Ethiopia failed to recorded by china . If the quantity and value of Ethiopia import from china is greater than the value and quantity of goods reported by china export to Ethiopia it indicates that capital flight from Ethiopia to other nations or those higher tax rate commodities comes from other nations recorded as lower tax rate commodities from china. The baseline

model exploits variation across products (time series analysis) for the three 2014 – 2016 different years,

Log Ext / IMt= fiit + fl1Taxesit + "it (1) or ln(EX-IM)= fiit +f1Taxesit+it

where EXt IMt is the measure of tax evasion; EXt is export of product group i by China to Ethiopia ; and IMt is imports of product group i at year t recorded by Ethiopia from China . In the equation fiit and "it represent the constant term and the error term respectively. The coe¢cient of interest is fl1 and is expected to be positive. This shows that as border taxes increase, tax evasion increases. The study employs various robustness checks. Firstly, the study uses quantities instead of values to calculate tax evasion. This involves repeating estimation of the equations above using ratios of quantities of exports (QEXt) to imports (QIMt) as proxy of tax evasion. As indicated above, the ratio of quantities should be one if there is no evasion;

log(QEXt QIMt) = fiit + fl1Taxesit + "it+fex. (2)

Secondly, the study uses panel setting, exploiting variation across products over time;

logEXt IMt= fiit + fl1Taxesit +Ext , i +i + "it+ext (3)

where , i is product ussed effects to control for unobservable product characteristics and i is time-…xed and ex. Exchange rate at time t effects to control for other macroeconomic shocks. This is also repeated for trade data in quantities.

Assumption in the literature ⇒ Exporters tend to report the true amount of their exports as exports are usually tax free (FOB value) so the researcher may not relay on Ethiopians export data

Importers are likely to report lower value of their imports as imports are taxed (in CIF terms) The gap that arises due to deference in recording (FOB vs CIF etc) are may not related to the tax rate. Variable measuring tariff evasion is generated at HS6 level

Value Gappct =log(Exp Valuepct)−log(Imp Valuepct)

I Data on import tax (MFN) rates (tariff) comes from ERCA I putting together the Duty Rate, Excise, VAT and SUR ⇒ ETR (Statutory) I dividing the total tax paid by value of imports from china which recorded by ERCA → Actual ETR

According to the research undertaken between USA AND CHINA BY Lyungwall and Wall (2007), studying capital flight from China, examine several alternative measures of capital flight, using different measures generated from the balance of payments indicates that chine's has experienced by controlling capital flight in and out flow of the country by underreporting export trade amount and quantity.

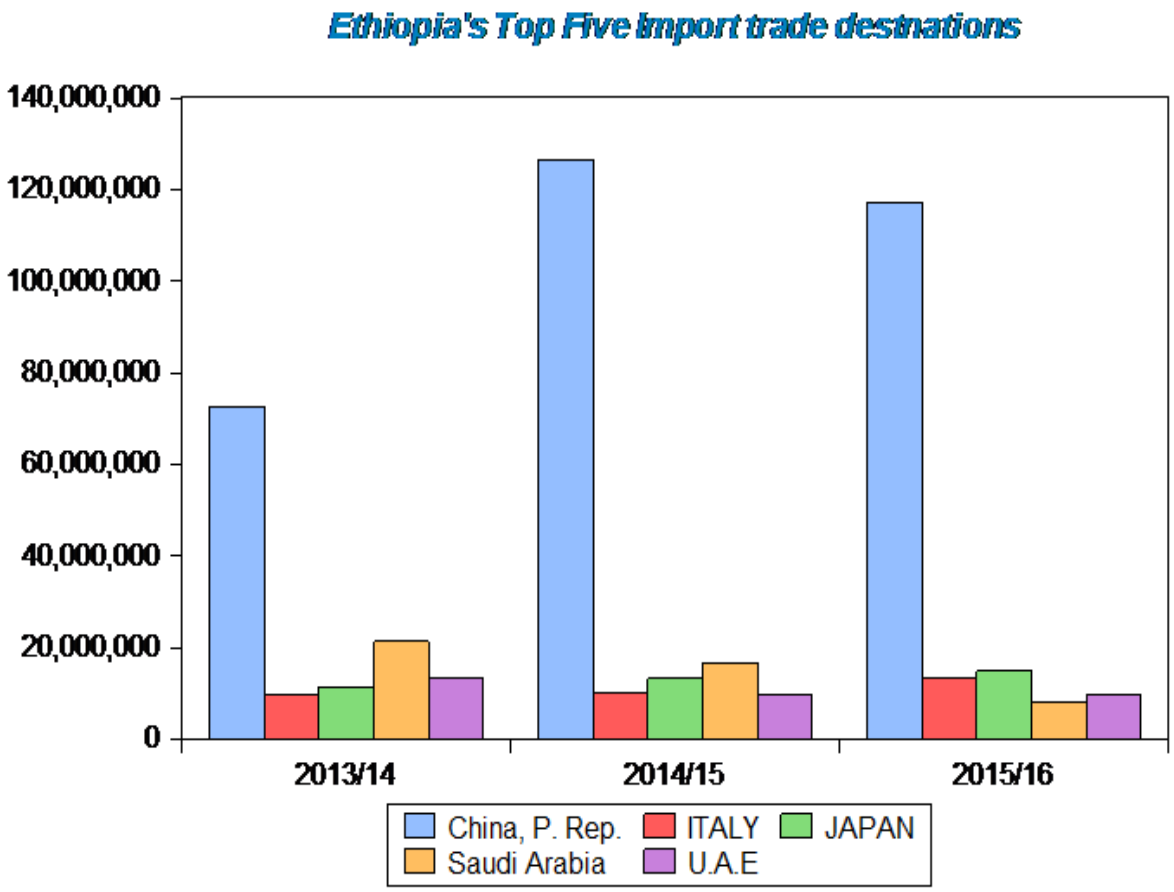
Kernel Density (KD) and Cumulative Distribution Function (CDF) Results The study uses Cumulative Distribution Functions (CDF) and Kernel Density (KD) to show the discrepancy between the reported exports from China to Ethiopia and the reported imports by Ethiopia from China . The purpose of Kernel Density is to construct a surface that accurately reflects the likelihood of reporting imports or exports occurring in each cell. The Cumulative Distribution Function shows the aggregated trade data reported by the two countries over a given period. All the values used in plotting the (CD) and (KD) are in logarithms. The results show a dissimilar trend when using the value or quantity of goods traded as a measure of tax evasion. The study reports only results obtained using the value of total products traded by using total value of goods reported in quantity and value. Figure 4 captures the results for the whole sample period from 2014 to 2016. In the …gure, CDF is shown on the left side and KD to the right. The results from the CDF and KD for the period 2014-2016 show that tax evasion was prevalent among all traders (see Figure 4). The importers reported a lower value of goods imported from China to Ethiopia compared to the reported Figures of China exports to Ethiopia . The study concludes that very low value as well as very high value goods importers recorded lower levels of tax evasion over the 2014-2016 period. Moderately high value goods importers were more likely to evade tax, suggesting that they are risk takers. The results suggest that for moderately high value goods importers tended to negotiate the tax they pay for their goods or used other methods to misrepresent the value of goods imported over the period 2014-2016. This strengthens the assertion by Hove et al. (2014) that low to moderate valued goods importers are highly sensitive to tax compared to high value goods importers. In fact, cumulatively, imports reported in Ethiopia from China were dominantly Higher than exports reported by China to Ethiopia for all goods imported.

CHAPTER FOUR
4. DATA ANALYSIS AND PRESENTATION

4.1. Ethiopian Import Data Analysis

As we have see from the table Ethiopian top five import destinations are china, Saudi Arabia, United Arab Emirates, Japan and Italy. From the this destinations chine's is the most import partner of Ethiopia.

Figure 1



Source National Bank of Ethiopia

The trade data of Ethiopia and China was analyzed in the study is for the period 2014-2016. It can be seen from the table that the Ethiopian imported quantity and value is significantly higher than China's report on exported quantity and value to Ethiopia. During the study period the

average annual import report of Ethiopia was higher by $ 3,164,559 in terms of value and 1,110 in terms of quantity when compared with the annual export report of China to Ethiopia. This result can indicate a major role for tax evasion and avoidance as well as capital flight in the country.

Table 1: Trade Gap Report

Year	Ethiopian Import Report from China	China Export Report to Ethiopia	Trade Gap in Value	Ethiopian Import Report from China	China Export Report to Ethiopia	Trade Gap in Quantity
2014	5,808,430	2,922,309	2886120	3,288	2,132	1156
2015	7,166,912	3,440,867	3726045	3,294	2,179	1115
2016	6,095,988	3,214,477	2881511	3,307	2,249	1058
Average	6,357,110	3,192,551	3,164,559	3,296	2,187	1110

Source: UN COMTRADE data base (WITS)

4.2. Descriptive Statistics

Table 2.1 shows the descriptive statistics of the variables used in the regression model. As shown in the table the mean value Log of Ethiopian Import from China is 11.44, while the mean value of Log of Chinese Export to Ethiopia is 10.56, showing significant difference in the report of the two countries. The potential reason for this over-reporting misleading report from Ethiopia import side and also the chine's trade policy of export tax rebate and tax refund also plays an important role for the trade discrepancy. From different research undertaken and finding and conclusions shows that china has experienced in under reporting for export for the purpose of capital flight control and exporters over reporting of export trade for the purpose of tax rebate and vat refund. For example the product type fuels Ethiopia import report from chine's is $

27,379.81 in thousands of US dollars but the reality from chine's report in three years is none. Due to this zero report in china side the discrepancy log of fuels between china and Ethiopia gives undefined because number cannot be divided to zero. This indicate that there is no fuels import from china to Ethiopia indicating that misleading in Ethiopia import report to world trade .come .

Table 2.1 descriptive statics for variables when product fuels, minerals and transportation report lucks from china side excluded from full sample year

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Observations
LOG__VALUE_IMPORT	11.44	11.76	14.86	4.16	2.36	41
LOG__VALUE_EXPORT	10.56	10.82	14.06	2.45	2.56	41
TWG	0.88	0.89	1.71	-0.91	0.51	41
Tax Rate	19.52	22.30	31.15	7.21	7.81	41
Exchange Rate	21.12	21.10	22.41	20.10	0.95	41

Figure 2 Trade discrepancy using total goods value report in a year

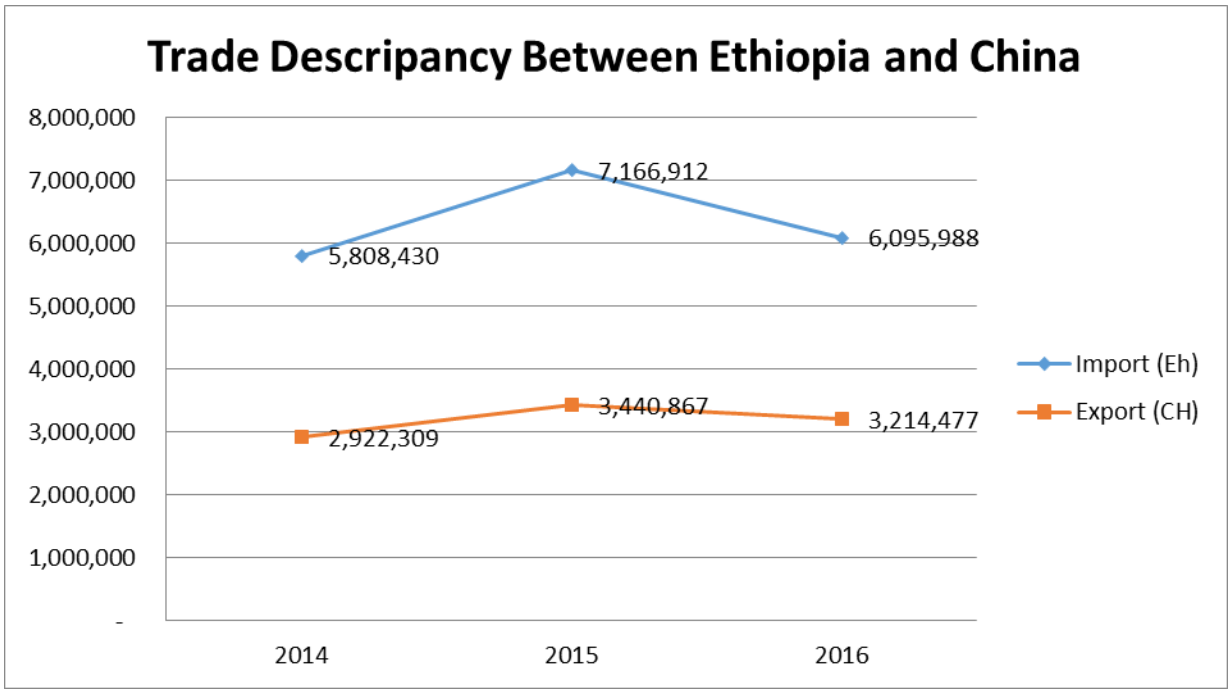
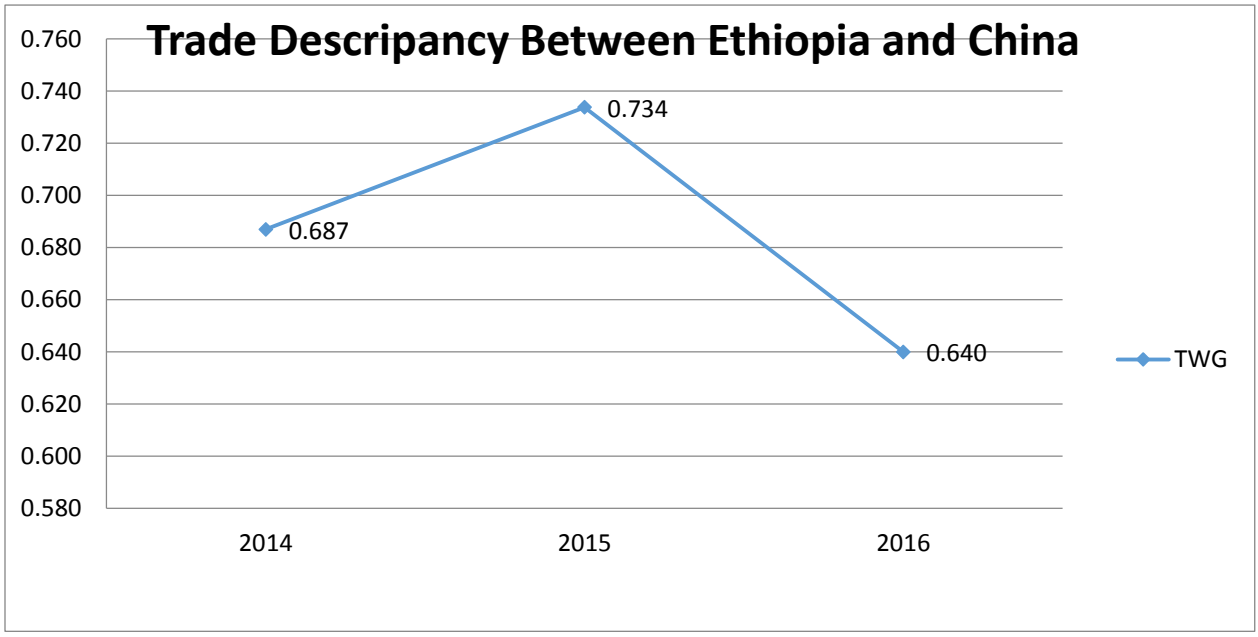


Figure 3 trade discrepancy using total goods log value report in a year



As we can from the graph trade weighted gap is increasing from 2014 to 2015 and again decreasing in 2016 which indicate that fluctuate from year to year.

4.3. Regression Analysis

According to the regression analysis, Tax Rate was insignificantly correlated with Trade Weighted Gap of Ethiopia and china. While Exchange Rate of the country had a significant and positive relation with Trade Weighted Gap with coefficient of 0.03. This means that as the exchange rate of Ethiopian Birr devaluation increases, the possibility of gap in the report of the trade weighted gap between the two countries also increases.

Table 2 trade weighted gap and regression analysis for import, export report and tax rate and exchange rate

Dependent Variable: TWG
Method: Panel Least Squares
Date: 06/17/19 Time: 04:54
Sample: 1 48
Periods included: 16
Cross-sections included: 3
Total panel (unbalanced) observations: 47

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TAX	0.011572	0.007307	1.583553	0.1203
EXR	0.0292	0.005733	5.093307	0
R-squared	0.024005	Mean dependent var		0.767853
Adjusted R-squared	0.002317	S.D. dependent var		0.558891
S.E. of regression	0.558244	Akaike info criterion		1.713579
Sum squared resid	14.02362	Schwarz criterion		1.792309
Log likelihood	-38.2691	Hannan-Quinn criter.		1.743205
Durbin-Watson stat	1.534025			

As indicated from the regression table above tax rate and exchange rate have appositive relationship and coefficients with trade weighted gap shown that as tax rate and exchange rate increases trade weighted gap also increases.

CHAPTER FIVE
5. SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATION

5.1. Summary of the findings

From the above discussion, the author as stated the following summarized finding: those are as the above finding revealed

As tax rate and exchange rate increases trade waited gap between the two countries increases from 2014-2015 and again decreases in 2016 which indicates fluctuations from year to year.

Tax rate and exchange are a positive relationship with trade waited gap but the exchange rate devaluation of Ethiopian currency with US $ Increases the trade waited gap also increases indicating that border tax evasion and money laundering increases. The Ethiopian import report from Djibouti to Ethiopia is none since 2009 but from ERCA import Report & tax paid or collected in 2014-2016 from Djibouti imported goods birr **2,681,498** (Djibouti origin products) and birr **15,594,366,390** (Asia including china, Europe & USA origin products) imported as Djibouti. This is done in order to decrease CIF value (shipping amount) & tax amount, due to the Ethiopian tax increases as the CIF value of goods increases.

The quantity and value of Ethiopia import report from china is greater than the value and quantity of goods reported by china export to Ethiopia it indicates that capital flight from Ethiopia to other nations or those higher tax rate commodities comes from other nations recorded as lower tax rate commodities from china.

According to the research undertaken between USA AND CHINA BY Lyungwall and Wall (2007), studying capital flight from China, examine several alternative measures of capital flight, using different measures generated from the balance of payments indicates that chine's has experienced by controlling capital flight in and out flow of the country by underreporting export trade amount and quantity.

5.2. Conclusion

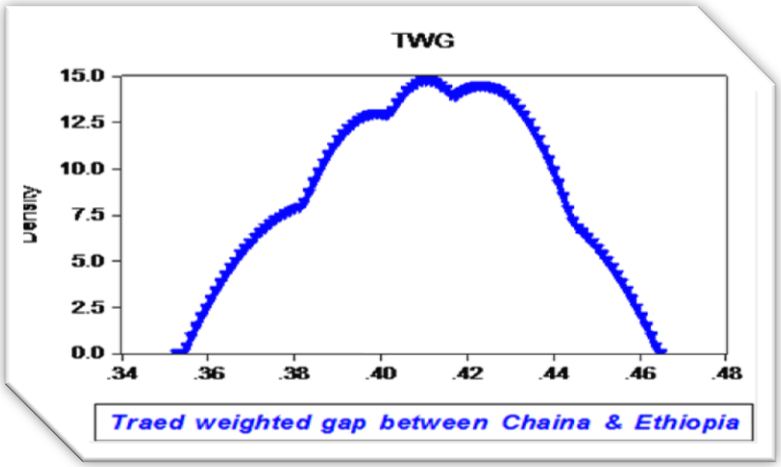
We believe that the discrepancies in international trade data are more than simply an inconvenience for empirical researchers. They may, in fact, reveal a significant amount of information about the incentives of exporters and importers who are confronted with taxes, tariffs, and capital controls, and have incentives to evade them.

Tax evasion, by its nature, is difficult to observe. The study uses quantitative cross-sectional & ratio analysis data for three period from 2014-2016. The study tried to use weather tax rate and exchange rate devaluation is impact on trade import export discrepancy and tax revenue (evasion). Since the late 2014-2016, reported Ethiopia imports from China and china exported to Ethiopia have shown report increasingly in differently. This discrepancy, which is varies by product categories, and in some cases takes the opposite sign. We find strong statistical evidence of under-reporting exports at Chinese border to avoid paying value-added tax (VAT) and tax rebate and capital flight. We also find from the ERCA import data & tax collected provide evidence of tariff evasion at the Ethiopia border chine's product and USA & Europe products imported as Djibouti imported but there is no the reality of trade report between Ethiopia's and Djibouti reported to the world trade.com (WITTS) data base since 2009. These things done in order to reduce the CIF value of imported goods, because the reality of Ethiopians tax rate & tariff is increasing as CIF value of imported goods increase. During This study research Review I have seen from different research under taken shows the chine's tax policy of export trade rebate & vat refund. Due to this reason chine's exporter also under report export report for the purpose of capital flight from export country to the chine's .Another Reason for trade discrepancy is the recording error or misleading report in the Ethiopian side. For example there is import report fuels from china to Ethiopia but the reality is china is not fuels exporter country and there is no report from china export of fuels to Ethiopia. This things makes complex and leads to calculations error to find out the reason of trade discrepancy in these research. This things shows there are many complex things in the Djibouti boarder and indirect evidence of evasion of capital controls (money laundering). Another problem that I have happen during this

study is the discrepancy of the value of import trade date from NBE & ERCA. According to the data from NBE Ethiopia as the tax rate and $ exchange devaluations of Birr increase the commodities imported from china to Ethiopia decreases. But according the data from ERCA and world TRADE.COM (WITTS) analyzed the imported amount of commodities increases from year to year & trade discrepancy between china and Ethiopia increases. This indicates that there is $ money laundered in the border of Ethiopia & Djibouti which participate in international trade of Ethiopia. As most current study shows the relationship between tax revenue and exchange rate are positively related & statically significant.

According to the research undertaken between USA AND CHINA BY Lyungwall and Wall (2007), studying capital flight from China, examine several alternative measures of capital flight, using different measures generated from the balance of payments indicates that chine's has experienced by controlling capital flight in and out flow of the country by underreporting export and exporter over reporting export trade for the purpose of tax rebate & tax refund in amount and quantity.

Figure 4: Kernel Density (KD)



Kernel Density (KD) and Cumulative Distribution Function (CDF) Results The study uses Cumulative Distribution Functions (CDF) and Kernel Density (KD) to show the discrepancy between the reported exports from China to Ethiopia and the reported imports by Ethiopia from China . The purpose of Kernel Density is to construct a surface that accurately reflects the

likelihood of reporting imports or exports occurring in each cell. The results from the CDF and KD for the period 2014-2016 show that tax evasion was prevalent among all traders (see Figure 4). The results suggest that for moderately high value goods importers tended to negotiate the tax they pay for their goods or used other methods to misrepresent the value of goods imported over the period 2014-2016. This strengthens the assertion by Hove et al. (2014) that low to moderate valued goods importers are highly sensitive to tax compared to high value goods importers. In fact, cumulatively, imports reported in Ethiopia from China were dominantly Higher than exports reported by China to Ethiopia for the low and moderate value goods importers. The KD results indicate that tax evasion was more prevalent among low to moderate value goods importers, suggesting that this group of importers were risk takers and highly sensitive to import tax.

5.3. Recommendation

Recommendations that the policy makers come with policies to control the import and export of goods traded between two countries to tighten trade waited gap. The government responsible for tax collection in Ethiopia should come up with tax controlling systems to ensure a fixed exchange rate to prevent depreciation of the domestic currency against other trading currencies. Policy makers come with review the high tax rate on import of goods traded from abroad in order to reduce tax evasion and avoidance. The government should be control and cross check the flow of data recorded & reported between the responsible entities to control Tax evasion & avoidance in Ethiopian.

This study is not conclusive. Future studies will focus on comparing the response of tax evasion on different trading partners of Ethiopia in order to establish the level of tax evasion on particular trading partners. This can also be extended to experimental studies investigating the impact of trade agreements on tax evasion.

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Annex

Dependent Variable: TWG
Method: Panel Least Squares
Date: 06/17/19 Time: 04:54
Sample: 1 48
Periods included: 16
Cross-sections included: 3
Total panel (unbalanced) observations: 47

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TAX	0.011572	0.007307	1.583553	0.1203
EXR	0.0292	0.005733	5.093307	0
R-squared	0.024005	Mean dependent va		0.767853
Adjusted R	0.002317	S.D. dependent var		0.558891
S.E. of regr	0.558244	Akaike info criterior		1.713579
Sum squar	14.02362	Schwarz criterion		1.792309
Log likelihc	-38.2691	Hannan-Quinn crite		1.743205
Durbin-Wa	1.534025			

Year	Product Type	Import (Eh)	Export (CH)	Log (Value Import)	Log (Value Export)	TWG	Tax	Exr
2014	Animal	64.16	11.62	4.16	2.45	1.708652	22.69	20.095
2014	Chemicals	297,747.96	139,973.14	12.60	11.85	0.754797	11.06	20.095
2014	Food Products	20,512.35	8,310.55	9.93	9.03	0.903501	27.16	20.095
2014	Footwear	78,129.71	48,455.50	11.27	10.79	0.477725	30.11	20.095
2014	Hides and Skins	18,463.76	10,398.61	9.82	9.25	0.574138	27.25	20.095
2014	Mach and Elec	2,337,191.24	1,244,970.92	14.66	14.03	0.629838	11.41	20.095
2014	Metals	1,244,486.89	565,585.38	14.03	13.25	0.788617	13.94	20.095
2014	Minerals	1,635.18	392.31	7.40	5.97	1.427456	7.21	20.095
2014	Miscellaneous	364,465.38	81,969.77	12.81	11.31	1.492081	22.46	20.095
2014	Plastic or Rubber	234,758.24	115,527.64	12.37	11.66	0.709046	14.63	20.095
2014	Stone and Glass	90,946.04	39,280.08	11.42	10.58	0.839549	22.3	20.095
2014	Textiles and Clothing	461,518.18	342,627.06	13.04	12.74	0.297879	31.15	20.095
2014	Transportation	578,741.76	246,376.92	13.27	12.41	0.853994	12.51	20.095
2014	Vegetable	2,826.22	903.74	7.95	6.81	1.140154	23.87	20.095
2014	Wood	69,479.79	28,068.18	11.15	10.24	0.906399	12.01	20.095

2015	Chemicals	300,315	92,882	12.61	11.44	1.173507	11.06	21.1
2015	Food Products	17,091	3,219	9.75	8.08	1.66942	27.16	21.1
2015	Footwear	88,097	50,073	11.39	10.82	0.564956	30.11	21.1
2015	Hides and Skins	21,079	4,724	9.96	8.46	1.495519	27.25	21.1
2015	Mach and Elec	2,855,214	1,280,761	14.86	14.06	0.801692	11.41	21.1
2015	Metals	1,432,143	507,620	14.17	13.14	1.037193	13.94	21.1
2015	Minerals	4,966	928	8.51	6.83	1.67789	7.21	21.1
2015	Miscellaneous	410,612	99,105	12.93	11.50	1.421473	22.46	21.1
2015	Plastic or Rubber	283,285	106,836	12.55	11.58	0.975157	14.63	21.1
2015	Stone and Glass	127,550	46,034	11.76	10.74	1.019138	22.3	21.1
2015	Textiles and Clothing	549,391	711,958	13.22	13.48	-0.25921	31.15	21.1
2015	Transportation	976,605	454,377	13.79	13.03	0.765155	12.51	21.1
2015	Vegetable	4,151	1,330	8.33	7.19	1.13849	23.87	21.1
2015	Wood	79,344	39,617	11.28	10.59	0.694549	12.01	21.1
2016	Food Products	16,393	5,094.04	9.70	8.54	1.168811	27.16	22.41
2016	Footwear	112,354	44,105.03	11.63	10.69	0.935084	30.11	22.41

2016	Hides and Skins	23,440	9,497.55	10.06	9.16	0.903393	27.25	22.41
2016	Mach and Elec	2,349,586	1,196,497.33	14.67	13.99	0.674841	11.41	22.41
2016	Metals	1,286,586	555,239.15	14.07	13.23	0.840349	13.94	22.41
2016	Minerals	3,164	863.77	8.06	6.76	1.298292	7.21	22.41
2016	Miscellaneous	264,006	95,408.70	12.48	11.47	1.017802	22.46	22.41
2016	Plastic or Rubber	321,629	134,521.16	12.68	11.81	0.871679	14.63	22.41
2016	Stone and Glass	144,865	59,299.73	11.88	10.99	0.893195	22.3	22.41
2016	Textiles and Clothing	588,339	684,515.78	13.29	13.44	-0.15141	31.15	22.41
2016	Vegetable	2,791	6,913.79	7.93	8.84	-0.90699	23.87	22.41
2016	Wood	106,330	44,758.02	11.57	10.71	0.86528	12.01	22.41

Table 1 descriptive statics by item of product and year

table 2 .1

	LOG__VALUE_IMPORT_	LOG__VALUE_EXPORT	TWG	TAX	EXR	
Mean	11.43956	10.55934	0.880222	19.52024	21.11573	
Median	11.75627	10.82124	0.893195	22.3	21.1	
Maximum	14.86466	14.06297	1.708652	31.15	22.41	
Minimum	4.16138	2.452728	-0.90699	7.21	20.095	
Std. Dev.	2.356091	2.556225	0.507771	7.810584	0.945164	
Probability	0.062214	0.03193	0.000012	0.169119	0.138699	
Sum	469.022	432.9329	36.08908	800.33	865.745	
Sum Sq. Dev.	222.0466	261.3715	10.31326	2440.209	35.73343	
Observations	41	41	41	41	41	

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Observations
LOG__VALUE_IMPORT_	11.44	11.76	14.86	4.16	2.36	41
LOG__VALUE_EXPORT	10.56	10.82	14.06	2.45	2.56	41
TWG	0.88	0.89	1.71	-0.91	0.51	41
Tax Rate	19.52	22.30	31.15	7.21	7.81	41
Exchange Rate	21.12	21.10	22.41	20.10	0.95	41

Table 2-3 ERCA GOODS IMPORT REPORT & TAX PAID (collected) FROM DJIBOUTI TO ETHIOPIA BUT no REPORT TO WORLD.TRADE.COM BY BOTH COUNTRY (AMOUNT IN TOTALS)

YEARS	CIF VALUE OF GOODS	TOTAL TAX PAID OR COLLECTED
2014	7,252,676	1,087,901
2015	6,294,853	1,593,597
2016	0.00	0.00
Total	**13,547,529**	**2,681,498**

Table 2 DJIBOUTI ORIGION PRODUCT imported from Djibouti & tax paid but no report to world trade.com

YEAR	CIF VALUE OF GOODS	TOTAL TAX PAID OR COLLECTED
2014	14,854,631,643	4,172,264,096

2015	22,315,862,280	5,290,864,557
2016	24,249,382,748	6,131,237,737
Total	61,419,876,671	**15,594,366,390**

Table 3 Asia including china, Europe & USA Origin product imported from Djibouti & tax paid (collected) but no report to world trade.com

Year	Product type	Amount in thousands of us dollars
2014	fuels	7462.76
2015	fuels	17007.54
2016	fuels	2909.51
	Totals	**27,379.81**

Table 4 fuels imported from china to Ethiopia reported by Ethiopia but no report by china