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ETHIOPIA'S ACCESSION TO THE WTO WITH EMPHASIS ON FOREIGN MARKET ACCESS

BY
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Ethiopia's Access to the WTO with Emphasis on Foreign Market Access

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ABBREVIATIONS AND ACRONYMS

AACC ..... Addis Ababa Chamber of Commerce

AD ..... Anti Dumping

AGOA .....Africa Growth Opportunity Act

CAP ..... Common Agricultural Policy (European Union member states)

COMESA ..... Common Market for Eastern and Southern Africa

CGE .....Computed General Equilibrium

CSA ..... Central Statistical Authority

DSP ..... Dispute Settlement Procedure

EBA ..... .Everything But Arms

EC .....European Commission

ECA .....Ethiopian Custom Authority

EDF .....European Development Fund

EEC .....European Economic Community

EFW ..... Economic Freedom of the World

EU .....European Union

FDI ..... Foreign Direct Investment

FTA ..... Free Trade Area

GATT .....Generalized Agreement on Trade and Tariff

GATS .....Generalized Agreement on Trade in Service

GSP .....Generalized System of Preference

HFTPI ..... Heritage Foundation Trade Policy Index

IMF ..... International Monetary Fund

LDCs ..... Least Developed Countries

MoTI ..... Ministry of Trade and Industry

NBE ..... National Bank of Ethiopia

NTB ..... Non Tariff Barriers

OECD ..... Organization for Economic Cooperation and Development

RTA .....Regional Trade Agreement

SAP .....Structural Adjustment Program

SPS .....Sanitary and Phytosanitary Standard

TGDPR .....Trade to Gross Domestic Product Ratio

TBT .....Technical Barriers to Trade

TPRM .....Trade Policy Review Mechanism

TRIM .....Trade Related Investment Measures

TRIP .....Trade Related Intellectual Property Right

UN .....United Nation

US .....United States

UNECA ..... United Nation Economic Commission for Africa

WB ..... World Bank

WTO .....World Trade Organization

Abstract

The purpose of the thesis is to discuss and analyze the effects of WTO accession on Ethiopia's economic policy making with particular emphasis on foreign market access for her exports. That is, its aim is to ask how important market access might be as an incentive for Ethiopia to join the WTO. Assessing Ethiopia's effective utilization of already granted preferential market access is also another major objective addressed in the paper. The paper also discusses the costs and benefits to be expected by Ethiopia if she accedes to the WTO.

We employ both descriptive and empirical analysis approaches. Trends of Ethiopia's exports by major destinations, Ethiopia's utilization of preferential market access, and major consequences of policy changes as a result of joining the WTO are among descriptively analyzed issues. For empirical analysis part, we employ the gravity model of international trade and include data on 31 of Ethiopia's trade partners. The empirical analysis is done using two sample periods-(1995-2003) and (2000-2003)-to observe the effects of recent preferential market accesses-AGOA and EBA initiatives. To enable us to draw sound conclusions from empirical results, three trade policy indicators are used. These are Heritage Foundation Index of distortions in international trade, Economic Freedom of the World international trade index and trade dependency ratio of Ethiopia's trading partners.

European Union (EU) member countries, COMESA member countries, Saudi Arabia, United States (US) and Japan are major importers of Ethiopian exporters. In addition to the Generalized System of Preferences (GSP), European Union granted Ethiopia preferential market access under EU-ASP economic partnership (Cotonou Agreement) and EBA initiatives. United States also offered preferential market access for Ethiopia under AGOA. However, it is found that Ethiopia's utilization of these preferential market accesses is not satisfactory.

Without taking these preferential market accesses into account, our empirical estimates show that import barriers imposed by Ethiopia's trade partners do not play an important role in determining the volume of Ethiopian exports. Therefore, the results suggest that the most favored nation mechanism and putative improved market access might not be an important criterion for deciding Ethiopia's Accession to the WTO. Hence she should demand long-enough periods both for accession process and transition period to address her supply side problems.

CHAPTER ONE

1. INTRODUCTION

1.1. Background

The key development challenge facing the African region in general and that of Ethiopia in particular is how to reduce poverty through sustained economic growth. There is an emerging consensus that trade, if well managed, could play an important role in confronting this challenge. This fact has been recognized by Ethiopia as evidenced by her interest in multilateral trade agreements. To this effect, she applied for accession[1] to the WTO in February 2003.

It is agued that trade agreements[2] are the different relations between various groups of developing and developed countries[3]. Thus, trade agreements reinforce and build on asymmetries that imposed the wills, concerns, and priorities of economic actors in developed countries on less developed economic actors in poor countries like Ethiopia. This process is being strengthened by the practice of appending the term 'trade related' to those areas of economic activities that international capital would like to regulate favorably for themselves and in the interest of the developed countries while appending the term 'trade barriers' to those rules and regulations that are believed to be unfavorable to international capital to the competitive advantage of developed countries. Trade

[1] The process of a country becoming a member of international agreement, such as the World Trade Organization (WTO). Member countries of WTO can be downloaded at: www.wto.org .

[2] Trade Agreements are the set of modalities, rules, and procedures governing the setting of tariff, non-tariff barriers, and the bounds of reciprocity between and among countries with regard to the flow of goods and services across national borders. It also includes concerns for a level of flexibility for contingent trade measures such as anti-dumping duties, countervailing and safeguard, measures, as well as dispute settlement rules and procedures.

[3] The concept is based on UN's classification of countries into developing and developed ones.

Related Intellectual Property Rights (TRIP)[4], Trade Related Investment Measures (TRIM)[5] and the focus on creating a multilateral agreement on investment in the WTO and most social and environmental regulations could be cited as example of 'trade related' and 'trade barriers' respectively.

Developing[6] and LDCs[7] are concerned that they have not been able to derive substantial benefits from trade due in part to the protective agricultural policies and trading practices of advanced countries. The estimated static welfare gains from complete liberalization computed by different scholars using CGE[8] models summarized below show the need for advanced countries' elimination of both tariff and non tariff barriers[9].

Table 1: Comparison of Estimated Static Welfare Gains from Complete Liberalization (in billions of US dollars)

+	CGE MODEL			
	Stern and et al.	Hertel T.	Anderson and et al.	Dessus and et al.
Total gains	1857	350	254	84
Of which : gains from services	1167	50	Not included in the model	Not included in the model
Gains for developing countries	272	147	108	18*

** Defined as non OECD.*

[4] In WTO, it used as an acronym for the Agreement on Trade related aspects of intellectual property rights.
[5] Trade related investment measure policy used by governments to influence the operations of foreign investors by establishing specific performance requirements and local content rules (mandating that investors use a certain proportion of domestic inputs in their production).
[6] Developing countries are less developed ones as defined by the United Nation based on the criterion of per capita incomes, human resource development and economic vulnerability and includes all countries in the world except developed and LDCs. In most literatures developing countries includes LDCs. But in this study, both are treated separately.
[7] LDCs are defined as those countries with per capita incomes of less than US $1000 , a human resource criterion, and an economic vulnerability criterion .The UN's lists of these countries (of which Ethiopia is one) can be found at http://www.un.org/special-rep/ohrlls/ldc/list.htm
[8] CGE is mathematical presentation of the economy; used to predict the impact of policy changes taking into account both direct effects as well as indirect effects that work through labor and other markets.
[9] Non tariff barriers to trade refer to all actions except tariff that impede transactions between foreign and domestic residents. These can include both trade related restrictions as well as government interventions in domestic markets via taxes or subsidies and also bureaucratic regulations.

Since long time ago negotiations have been undergoing to eliminate or reduce these barriers both on bilateral and multilateral basis. However, it has been hampered by lack of a free and fair global market place. Even after the implementations of the AGOA[10] and EBA[11] initiatives in 2000 and 2001, scholars question whether Africa really enjoyed unrestricted market access to US and EU[12], respectively. The work done by UNECA on the applied tariffs (as summarized in table 2 below) indicated that tariff barriers still apply to less developed countries in addition to restrictions imposed on some products.

Table 2: Tariff Barriers still Applied to Developing Countries (in percentage)

Exporter	Importer							
	EU		US		Japan		World	
	Industry	Agriculture	Industry	Agriculture	Industry	Agriculture	Industry	Agriculture
Africa	1.3	1.1	1.7	1.7	2.9	2.7	4.6	16.5
Developing countries	3.1	2.4	2.9	2.4	4.2	3.3	5.8	17.9
World	3.9	3.2	2.6	2.3	4.4	3.7	6.2	5.4

Source: UNECA, (2005): Unrestricted Market for Sub-Saharan Africa countries, P.5

[10]Represents United States legislation providing "duty free" access for a large number of products for most African countries.

[11] Refers a 2001 EU initiative to grant least developed countries duty and quota free access for their exports.

[12] Lists of European Union Member countries can be found at http://en.wikipedia.org/list

1.2. Statement of the Problem and Motivation

The interest of Ethiopia in the WTO membership raises the obvious question about the benefits from accession to WTO. It is not enough to say that the main benefits are her right to participate in the proceedings of the WTO working committees, Working Parties or the Council. What matters are the tangible benefits derived from membership. Thus, Ethiopia should be able to point at such benefits to convince her critics.

As any trade policy change, membership in the WTO has its costs and benefits. The main costs are expected to be a short term decrease of output due to stronger foreign competition, lower fiscal revenues as a result of reduced import tariffs, and restricted sovereignty over trade related policies.[13]The benefits are believed to include improved access to major export markets via the Most Favored Nation (MFN)[14] mechanisms, access to dispute settlements, invigoration of domestic economic reforms, and an increase of foreign direct investments.[15]This research, however, concentrates on one of these issues, improved access to foreign markets.[16]

Specific features of Ethiopian exports revealed that more than 80 percent of its exports are imported by EU, USA, Japan, COMESA, and Saudi Arabia.[17]On the other hand, Ethiopia is enjoying 'free' market access to its major trading partners under ACP-EU Cotonou agreement, AGOA and EBA Initiatives with US and EU. Moreover, she is also a member of COMESA which she didn't yet fully integrated with, but is intended to open

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[13] Langhammer and Lucke (2000) pp.21-27

[14] Most Favored Nation (MFN) is the 'normal' non discriminatory, tariff charged on imports of a good. In commercial diplomacy exporters seek MFN treatment that is, the promise that they get treatment as well as the most favored exporter.

[15] Drabek and Laid (1998) pp. 244-251

[16] Note that sometimes access to export markets is understood to include access to the MFN mechanism as well as to dispute settlement. In this study, however, I concentrate on the first point.

[17]NBE Annual Report 2003/04

markets within the regional economic grouping for goods originating from member countries.

This research is, therefore, to investigate: if Ethiopia has such market arrangements with her major trading partners, why is she interested to join the WTO at this moment? More precisely, will WTO membership at this moment really improve market access for Ethiopian exports?

1.3. Objective of the Study

The purpose of the paper is both to descriptively and empirically analyze the effect of Ethiopia's accession to WTO on her foreign market access. Specific objective of the study include:

a) To estimate the extent to which barriers imposed by Ethiopia's major trading partners hurt her exports at this moment.

b) To assess Ethiopia's utilization of preferential trades granted under GSP, EU-ACP economic partnership, EBA Initiatives and AGOA.

c) To assess the policy implications of Ethiopia's accession to WTO, in general.

d) To highlight the costs and benefits of joining the WTO for Ethiopia.

e) To evaluate progress of Ethiopia's regional integration into COMESA.

f) To draw policy recommendations based on the finding.

1.4. Methodology of the Study

To address the problem of the research and accomplish the objective as well, both descriptive and empirical analysis is under taken.

1.4.1. Data Collection and Sources

Secondary data is used for the analysis. The major sources of the data are: World Bank (WB), International Monetary Fund (IMF), National Bank of Ethiopia (NBE), Ethiopian Custom Authority (ECA), Ministry of Trade and Industry (MoTI), World Trade Organization (WTO), and United Nation Economic Commission for Africa (UNECA).

1.4.2. Methodology of Analysis

For descriptive analysis, the investigator used both the data and empirical research outputs of various scholars. For the empirical analysis, the study employed gravity model[18] of international trade.

1.5. Hypothesis of the Study

Ethiopia's export depends on small number of commodities with a low degree of processing. She trades more with EU member countries, US, COMESA member countries and Middle East Arab countries.

Therefore, based on the theoretical underpinning of Gravity model, it can be hypothesized that trade policies of trading partners are adversely affecting Ethiopia's export. However, the coefficients of Gross Domestic products of these countries have positive and significant effect on Ethiopia's export. The coefficient of distance between Ethiopia and her trading partners expected to be negative and significant. But Ethiopia's export to COMESA member countries is expected to be significantly improving. More explanations and descriptions are made in chapter four.

[18] The gravity equation predicts that the volume of bilateral trade is positively related to the countries' gross domestic products (GDPs) and negatively related to trade barriers between trade partners. Detail description and derivation of the model is made in chapter four of the paper.

1.6. Significance of the Study

Ethiopia is on process to join the WTO. Therefore, it is intended to evaluate its importance from the point of view of improving foreign market accessibilities for her exports and in a due course to contribute suggestions and comments for policy makers. Therefore; the significance of the research is to fill these gaps.

1.7. Scope and Limitation of the Study

Analyzing the impact of WTO accession on Ethiopia's export requires investigating both demand and supply side of the economy simultaneously. The supply side issues include foreign direct investment, legal and regulatory environment, institutions and institutional issues as well as a few and dominant sub sectors namely agriculture, livestock and meat manufactures and tourism. Demand side issues include market access and sub sectors related to domestic demand.

This study, however, confined to analyze the likelihood effect of Ethiopia's accession to WTO on her foreign markets. This is partly due in lack of proper data on all the required variables to use comprehensive approaches to evaluate both the demand and supply sides of the policy changes.

1.8. Organization of the Study

This paper is organized in six chapters. General introduction is given in the first chapter. The relevant literature in the field is discussed in the second chapter. In chapter three thorough discussion and descriptive analysis of Ethiopian export and import sector, Ethiopia's utilization of preferential market access and possible policy changes resulted from accession to the WTO are made. In chapter four, a model specification and estimation technique for empirical analysis is presented. Following this, chapter five

contains results and discussion of empirical analysis. Finally, conclusions and recommendations are presented in the sixth chapter.

CHAPTER TWO

2. Theoretical and Empirical Review of Literature

2.1. WTO and Its Key Principles and Agreements

Most of the WTO agreements are the result of the 1986-94 Uruguay round negotiations, signed at the Marrakesh ministerial meeting in April 1994. There are about 60 agreements and decisions totaling 550 pages. The primary responsibilities of the WTO are: (1) to provide a forum for multilateral trade negotiations and framework for their implementation, (2) to administer the trade policy Review Mechanism, (TPRM), & (3) to administer the dispute settlement procedures (DSPs) .[19]

Prior to the establishment of the WTO, the GATT was the only multilateral framework for administered protection. The latter now represents one of several agreements administered by the WTO. In particular, the Uruguay Round gave rise to two new multilateral agreements: the general agreement on trade in services (GATS) and the agreement on trade related aspects of intellectual property rights (TRIPS). These agreements cover forms of trade and issues previously outside the scope of the GATT.

In addition there are four plurilateral agreements covering government procurement, trade in civil aircraft, trade is bovine meat and trade in dairy products. A plurilateral agreement is binding only on countries that sign the agreement. In contrast, multilateral agreements such as the GATT are binding on all countries who agree to become members of the WTO. The TPRM is both a function and a set of procedures whereby the WTO monitors the trade policies of member countries. To this end, two reports are prepared; one by the WTO staff and one by the member country being evaluation of these policies

[19] Harry P. Bowen, Abraham Houarder & Jean - Marie Viaere, 1998 pp. 59-109

from an economic perspective. The stated intent of these reports is to maintain transparency in the formulation and implementation of trade policies by providing a mechanism for multilateral surveillance of member countries trade practices.

The Dispute settlement function is a set of procedures that detail how a WTO member can initiate a complaint against the trade practices of another member and how this dispute is to be processed and ultimately resolved.

2.1.1. Key Principles of the WTO

Two key principles underlying the GATT now forged by WTO and used is all-multilateral agreements are that of non-discrimination (Article 1) and national treatment (Article II)[20].

The non-discrimination or "Most- Favored-Nations (MFN) principle requires WTO member countries to treat products imported from different trading partners on the same basis. The GATT does permit exceptions to the MFN treatments. Custom unions are allowed as are certain historically recognized preferential trade relation ships. In addition, developing countries may be granted tariff preferences under what is known as the generalized system of preferences (GSP). Regional trade agreements (RTA) such as customs unions and free trade areas are fundamentally at odds with MFN principle underlying the GATT. Like GATT, GATS also permits exceptions. The GATS prohibits in principle, certain market access restrictions, namely, limitations on the number of suppliers, the value of transactions or asset, the total quantity of service output, the number of natural persons that may be employed, the type of legal entity through which service supplier is permitted to supply a service, and the share of equity ownership of a

[20] Ibid

foreign investor or the absolute value of the foreign investment. The TRIPS also permits exceptions for non discrimination principle.

National treatment requires that foreign goods, once inside the border of a country, be treated the same as domestically produced goods. One implication of national treatment is that trade barriers are only to be applied at the border; domestic polices should not therefore become barriers to trade. National treatment services to limit the use of domestic policies to restrict trade and permits countries to more easily identify the trade barriers that may need to be overcome.

2.1.2 Key Agreements of WTO

The rules of the WTO regime extend beyond what its predecessor, the GATT, used to address (i.e. trade liberalization on goods) to specific policy choices on services, investment and intellectual property rights. Thus, its influence extends to new areas of domestic policy making critical to the development process. It also has stronger compliance mechanisms to discipline member states.

As the purpose of this section is to identify what opportunities and constraints the WTO regime provides, only selected agreements are addressed.

i) Subsidy and Countervailing Measures[21]: subsidy involves financial contributions by a government or public body for instance, in terms of direct transfer of funds (grants of loans), equity infusion (through investment decisions which are inconsistent with the norm) and potential direct transfer of funds or liabilities by way of loan guarantees (if the firm pays lower than the case without government guarantee). Revenue forgone or not collected such as tax credits and provision of goods or services

[21] For detail please visit at: http://www.wto.org

other than general infrastructure at lower prices or purchases of goods at higher prices are also considered as subsidies.

A member shall neither grant nor maintain subsidies contingent at up on export performance and up on the use of domestic over imported goods. If any subsidy of one member has resulted in adverse effects on the interests of another member, the measure granting subsidy shall take appropriate steps to remove the adverse effects or shall withdraw the subsidy.

Non-actionable subsidies, which are not directed towards a specific firm or industry, are not subject to countervailing duties or other remedial actions. It includes assistance for research activities, grants to disadvantaged regions within the country and assistance to promote adoption of existing facilities among all similar firms to new environmental requirements.

A members shall take a countervailing measure, which is a special duty levied on imported good, if the said good is thought to be subsidized. Developing countries with a per capita income of less than $ 1,000 are exempted from the prohibition on export subsidies, while other developing countries are exempted for a period of eight years from the date of entry in to force of the WTO agreement. A country may, however, apply for an extension. Developing countries are also exempted for five years from the prohibition of subsidies contingent upon the use of domestic over imported goods. Remedies over prohibited subsidies shall not apply to a developing country provided that its export subsidies are consistent with the above stated provisions (Article 27).

ii) Safeguards[22]: A member may apply to a safeguard measure to a product if that member has determined that such product is being imported in to its territory in such increased quantities compared to domestic production. A safeguard measure is applied only up on investigation by a competent authority.

Safeguard measures shall not be applied to product originating in developing countries whose share of imports of the product concerned in the importing member does not exceed 3% and the imported share collectively accounts for not more than 9% of total imports of the product concerned. Developing countries shall have the right to extend the period of application of a safeguard measure for up to two years beyond the maximum period (eight years).

iii) Antidumping Measures: A product is considered to be dumped if the price of the product exported from one country to another is less than the normal value in the ordinary course of trade. In order to offset or prevent dumping, an importing party may levy an antidumping duty, but not greater in amount than the margin of dumping (Article 15)

iv) Sanitary & Phytosanitary Measures: It refers to measures applied to protect human, animal and plant life or health arising from the entry, establishment or speed of pests, diseases, disease- carrying or disease causing organisms, additions, contaminants, toxing or disease causing organisms in food, beverages or foodstuffs. This agreement is based on the condition that members need to have harmonized sanitary and phytosantary measures.

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[22] Ibid

Sanitary measures include all relevant laws, regulations, requirements and procedures including end product criteria, processes and production methods, testing, expectation, certification and approval procedures. It also involves quarantine treatments, including the transport of animals or plants or the materials necessary for their survival during transport; provisions on relevant statistical methods, sampling procedures and methods of risk assessment, and packaging and labeling requirements directly related to food safety. Accordingly, a member country may keep at bay imports from another member country if goods do not confirm to the internationally set standard. The least-developed country members may delay application of the provisions of sanitary and phytosanitary agreement for a period of five years following the date of entry in to force of the WTO agreement with respect to their sanitary and phytosanitary measures affecting imported products (Article 14).

v) Trade in Agriculture[23]: the agreement on agriculture requires members to convert all non- tariff barriers in to bounded tariff that represent the ceiling to which they could be raised, and reduce the tariffs according to the commitments agreed up on, to provide market access. All domestic support measures and export subsidies have to be reduced and eliminated over a six years period commencing 1995 for developed countries.

A several safeguard mechanism was also installed for imports that a country identifies as subject to safeguards in its schedules. This allows countries to impose additional duty if either the volume exceeds or the unit price falls below a trigger level. Developing countries are allowed to apply different rates of tariff reduction and levels of domestic

[23] Ibid

support. Developing country members shall have the flexibility to implement reduction commitments over a period of up to 10 years. Governments are allowed to provide assistance to encourage agriculture and rural development, investment and agricultural input subsidies generally available to low income or resource- poor producers.

Developing country members shall not be required to under take commitments with respect to the provision of subsidies to reduce marketing costs of agricultural exports including transaction and transport costs (Article 9). Least developing countries on the other hand, are exempted from domestic support and export subsidiary commitments.

vi) Trade in Services[24]: A service refers to a range of areas, including transport, communication, education, health, and finance, among others, except those supplied by government. The agreement on trade in services calls for progressive liberalization of regulations that stand as obstacles for trade and investment is services. The international delivery of the services is regulated under four modalities, including: cross-border supply, such as telephone and postal services, consumption abroad, such as tourism, foreign command presence, such as banks, insurance companies etc, and presence of natural persons, such as temporary workers of any skill.

A member country has to provide a schedule with respect to the sectors chosen to liberalize or provide market access. The schedule includes terms, limitations and conditions as well as qualifications on market access. Accordingly, progressive liberalization of the market should be made.

In accessing their markets, developing countries shall be given flexibility in liberalizing fewer types of transactions and in favorable timeframe. The participating of developing

[24] Ibid

countries will be facilitated through specific negotiated commitments including; strengthening domestic service through access to technology, improving access to distribution channels and information networks, and liberalizing of market access of export interests. Least developed countries shall be provided special priority in the implementation of trade in services. Members shall give special consideration to opportunities for the LDCs in telecommunication services.

vii) Trade Related Investment Measures (TR1Ms)[25]: The aim of the agreement on TRIM is to eliminate trade-distorting investment measures taken by members. The agreement does not define TRIM, leaving to members to decide which actions are illegal, though TRIM is inconsistent with the agreements on agricultural and industrial goods.

Measures considered inconsistent with the TRIM agreement include measures which require the purchase or use by any domestic source, or which require the purchase or use of imported products to be limited to an amount related to the volume or value of local products that it exports. Also measures which restrict the volume or value of imported inputs to an enterprise as a proportion of local production or which limit the imported inputs of an enterprise to the amount of foreign exchange it earns from export are regarded as inconsistent, hence should be eliminated.

Industrialized countries were expected to eliminate such inconsistent measures within two years, developing countries within four years and least developed countries within seven years. Provision for extension is also provided, particularly for developing member countries.

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[25] For detailed information on the agreement visit also: http://www.wto.org

A developing country member shall be free to deviate temporarily from the provision of TRIM. Developing country members could apply quantitative restrictions for balance of payment purposes in a manner which takes account of the continued high level of demand for imports likely to be generated by their programs of economic development.

viii) Trade Related Intellectual Property Rights (TRIP) Agreements: The agreement on TRIP aims at reducing distortions and impediments of international trade taking into account the need to protect intellectual property rights. TRIP include copy right, trade marks, geographical indications, industrial designs, patents, layout designs of integrated circuits and protection of undisclosed information[26].

(a) Copyright and related rights including computer programs, data compilation, performers, recordings, broad casting organization rights extend to expressions and not to ideas, procedures and methods of operations. Protection to expression will be in line with the Berne convention. [27] The terms for protection for works not being to natural persons, will be a minimum of 50 years, from the date of publication or creation.

(b) A trademark constitutes a sign capable of distinguishing the goods or services of one undertaking from those of others. The term of protection shall be not less than seven years, renewable indefinitely.

(c) Geographic indications refer to indications that identify a good originating from a specific territory where its quality or other characteristics are attributable to that territory. Such geographical indications shall be protected. Additional protection shall be made for wine and spirits.

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[26] Ibid

[27] Refer to: http://WWW.Law.Cornell.edu/treaties /Berne/ overvies.htm.

(d) Industrial designs: New or original industrial designs, independently created shall be protected for 10 years.

(e) Patents shall be available for any inventions of products or processes for all fields of technology provided that they are new, involve an inventive element (non-obvious) and capable of industrial application. The protection period shall be 20 years. Plants and animals other than microorganisms are not patentable.

(f) Integrated circuits. There shall be no importing, selling, or otherwise distributing for commercial purposes of protected layout designs of integrated circle. Protect shall be for 10 years.

A developing country member is entitled to delay the provisions of TRIP for a further period of four years from the date of application. Least developed countries can delay the provisions of TRIP for 10 years from the date of application, which is also suspect to extension up on request.

ix) Technical Barriers to Trade (TBT): members are expected to observe international technical regulations and standards of products, which otherwise could standardizing bodies accept and comply with the provisions set by an international standardizing body, such as ISO/IEC information center in Geneva.

Technical regulation shall not be more trade- restructure than necessary to fulfill a legitimate objective, taking account of the risks of non-fulfillment several create for instance on national security requirements, the prevention of deceptive practices and protection of human health or safety, animal or plant life or health or the investment.

x) Textile and Clothing: Textile and clothing have been excluded from basic GATT principles until 1993 because of long-term bilateral deals (outside the GATT between importing (industrialized) and exporting (developing) countries. So the agreement on textiles and clothing in 1994 had no alternative except phasing at the multifibre agreement quota over a longer period of time (10 years).

The phase-out schedule has four sets: 16% of the quota /volume to be phased out by January 1995, 17% by January 1998, 15% by January 2002, and the remaining 49% by January 2005. Under the agreement there would be no change either in the process of the schedule of liberalization, or the final date for complete integration in to the WTO principles (Article 2).

Moreover, the agreement on textiles and clothing (ATC) allowed imports of products under quota, but not included in the schedule to grow by 16, 25, and 27 percent. The agreement provides transactional safeguarding measures if increased import volumes cause or threaten serious damaged to the domestic industry, and they can be maintained for a maximum of 3 years and invoke on a country by country basis. However, this can only be applied in products which have not yet been integrated in to the mainstream GATT/WTO rules.

The textile and clothing agreement requires members to take into account exports of developing countries when applying the transitional safeguarding provision and to accord more favorable treatment when setting economic criteria for imports from these countries. It also prohibits the use of the provision for developing country exports of cottage industry handlooms, traditional folk art textiles and products. The agreement on

textile and clothing provides significantly more favorable treatment in the application of the transitional safeguards for least developed countries (Article 6.6).

2.2. The WTO Accession Process and the Content of Accession Packages

Only few WTO rules regulate the process of accession.[28] Accession is governed by Article XII of the Marrkesh agreement establishing the WTO, which defines in highly general terms and the rules for accession to the WTO. The specific terms of accession must be negotiated between the WTO members and the applicant country. Because each accession is a negotiation between the WTO members and a particular country with typically different economic conditions, each accession is unique. As Lanoszka (2001) put it; "Article XII does not stipulate any membership criteria, and this signals perhaps the most problem of legal aspect of the accession process . . . . No guidance is given on the terms to be agreed", these being left to the negotiations between the WTO members and the applicant. Further more, Article XII does not identify any concrete steps nor does it provide any advice when it comes to the procedures to be used for negotiating the terms of accession [29]

However, the WTO Secretariat, in consultation with WTO members, have drawn up a set of procedures for a accession which are closely modeled on those followed by contracting parties to the GATT and relevant provision.[30] These procedures require that:

(1) An applicant must send a communication to the director - General of the WTO indicating its desire to accede to the WTO under Article XII;

(2) This communications then circulated to all WTO members and a decision is taken whether to approve the establishment of a working party;

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[28] for a detailed description of the procedures see, Lanoszka (2001)
[29] Ibid p. 589-593
[30] Maxine Kennett, Simon J.Evenett & Jonathan Gage (2005)

(3) Once a working party has been established and a chairperson has been appointed, the applicant submits a memorandum on its foreign trade regime;

(4) The working party meets to examine the memorandum and the applicant provides further information and answers;

(5) A working party report is prepared;

(6) At the same time, bilateral negotiations are undertaken on concessions and commitments on market access for good and services (as well as other specific terms of accession)

(7) A goods and services schedule are prepared;

(8) There after, a draft decision and a draft protocol of Accession. (Containing commitments listed in the working party report and goods & services schedules) are prepared.

(9) The working party, and then the general council or the ministerial conference, approves the accession package;

(10) Thereafter, the applicant formally accepts the accession package;

(11) The applicant notifies the WTO secretariat of its formal acceptance; and

(12) Thirty days later the applicant becomes a member of WTO.

During the consultations between the members and the secretariat on these procedures, an understanding was reached between the members that these procedures would remain a practical guide for applicants, and would not be submitted to the ministerial conference / general council for formalization in to conditions of entry[31].

The main outcome of the accession negotiations are the terms of accession setout in the protocol of accession. The protocol of accession includes all the commitments take the

[31] Ibid

form of a general commitment to abide by WTO rules, of a series of specific commitment to abide by WTO rules, of a series of specific commitments referred to in the working party report.[32] Acceding countries should accede on terms that are broadly comparable both for acceding countries among themselves and in comparison with incumbent.[33] In practice, however, the situation may involve some what differently. In several areas, acceding countries have made commitments in excess of incumbent members.[34]Acceding countries, for instance, are required to bind all tariffs while many developing countries still have relatively high shares of their non-agricultural tariff lines unbound.[35]

Similarly, there is pressure on new members to sign all plurilateral agreements without properly addressing the question of whether this practice serves the interests of acceding country or not. In reporting and discussions in the general council, Naray noted that:

" . . . a number of developing countries delegations recalled that in the accession process reasonable conditions were required of and imposed on, applicants because developed country members had requested that acceding countries accept more stringent conditions and a higher level of commitment than was required from members themselves ('WTO- plus' requirement). For example, the requirement to adhere to several plurilateral agreements, to guarantee full transparency and objectivity and that markets access commitments should be about the same as those made by countries at similar level of development."[36]

Another important issue required to be raised is a member's status determines whether it is entitled to use the special and differential (S&D) treatment provisions of the WTO agreement. In general, there are no WTO definitions of "developed" and "developing"

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[32] Ibid
[33] WTO staff working paper DERD-2002-02
[34] Langhammer and Lucke (1999), Michalopoulos (2000) & Nara (2001).
[35] Naray (2001)
[36] Ibid pp.91

countries. The general principle is the selection based on the principle of what can be called a "self-appointment" For countries joining WTO through access process, their status largely depends, on the terms agreed in each specific area of the accession negotiations.[37]

If an acceding country makes an explicit commitment to restrict its domestic agriculture support at a level that is lower than what is allowed for developing countries, the commitment would be binding even if the country self-appoints itself to the developing country status or if it wanted to increase its agricultural support to the level allowed for "developing countries" at a later stage.

However, the role is quite clear with respect to "least-developed" countries. The WTO recognizes as least developed countries those countries which have been designated as such by the United Nations. There are correctly forty nine least developed countries on the UN list. The status issue is related to the right to transition periods to implement the WTO Agreements. Article XIV.2 of the WTO agreement states that a member which accepts the Marrakesh agreement after its entry into force shall implement those concessions and obligations in the multilateral Trade Agreements that are to be implemented over a period of time starting with the entry into force of this agreement as if it had accepted this agreement on the date of its entry in to force. Transition periods are thus by no means made automatically available to acceding governments. Article XII on the other hand offers members a margin of manoeuvre. In practice, members have made it clear that transition periods will only be granted if the applicant is successful in making a strong enough case to prove that such a period is necessary.

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[37] The "deminimis "level for developing country members is 10 percent while it is 5 percent for developed countries (Article VI of the Agreement on Agriculture).

According to article XII.1 of WTO (T) "the accession shall apply to this agreement and the multilateral trade agreements annexed there to". In other words, acceding countries are expected to accept all the rules and conditions as specified in each of the WTO agreements. This rule is known as the principle of single undertaking. It should also be noted that countries are joining the WTO under what may be called status quo for the incumbent countries. The acceding countries cannot negotiate any change in the incumbent countries' commitments of market access nor can they negotiate any change in the rules of the WTO agreements. The acceding country is joining the WTO under the existing commitments of the members. As any new member of a "club" has to abide by the rules of the club he/she wants to join, countries acceding into the WTO must accept the terms and conditions of the WTO as they stand[38].

2.3. Theoretical Reasons for Joining the WTO

Economists have identified theoretically the reason why countries join WTO stating the argument that governments may be in the position to pursue what is known as "beggar-thy- neighbor" policies and that they will agree to sign international trade agreements as a way of mitigating the incentives to do so[39] . The countries can pursue the "beggar-thy-neighbor" policies by imposing externalities on their trade partners in the absence of an agreement, and the main mechanism through which a country can do so is through changes in terms-of-trade. These changes are, of course, only possible due to the countries large size or its monopolistic position in the market. To put it differently, governments can act in their own interest if they are in the position to impose optimal

[38] Grynberg & Remy (2004)
[39] Staiger, R.W. (1995)

tariffs in order to maximize the country's welfare. However, other (large) countries can do the same, which could lead to trade wars and an erosion of national welfare in each country. By joining a trade agreement, large countries can reach a higher level of national welfare by making their commitments to lower tariffs subject to an international agreement backed by sanctions.[40]

A related theoretical argument concerns strategic interaction between governments and its private sector. As shown in the pioneering work of Kydland and Prescott (1977), the necessary condition for economic policy to be time-consistent is that governments pursue the first-best policies. This is virtually never the case in the presence of trade interventions. The failure to pursue the best policies will lead to a search for better alternatives and pressures for policy changes. As a result the creditability of government polices to the original commitments will be adversely affected. An international agreement that locks in the original commitments will boost the government credibility.

2.4. Empirical and Practical Review of Related Literature

In this section, empirical literatures are reviewed. Practical benefits and costs of joining WTO with special emphasis on LDCs are also closely reviewed.

2.4.1. Review of Practical Benefits and Costs of WTO Membership for LDCs

LDCs are characterized by: remoteness (large economic distance from major markets, (that is, landlocked states), reliance on a small number of export good, mostly raw materials, weak administrative capacities, large economic and ecological vulnerability, lack of market-oriented institutional infrastructure , and political insatiability after

[40] ibid

compounded by civil disorder[41].Given such characteristics, the gains from WTO membership seem to be small if they are assessed only in terms of improved market access for the traditional exports of LDCs[42]. Raw materials mostly enjoy low or zero tariffs in OECD countries and bottlenecks on the LDCs side (including inadequate transport facilities) seem to hamper export expansion more than policy induced barriers on the demand side.

Furthermore, although some raw materials suppliers have been affected by AD procedures of major industrial countries, the LDCs are typically not price setters in the world markets of individual raw materials and therefore have not been targets of AD measures, quantitative restrictions, or other NTBs. Nevertheless, there are a number of good reasons for LDCs to join the WTO[43].

2.4.1.1. Benefits

The attractiveness of WTO is that governments are able to obtain an improved access to markets for their exports. The accession itself will not affect the MFN rates of trade partners of the acceding countries. However, the latter will be able to benefit from all commitments made by signatories of the WTO agreements in the future trade negotiations. [44] By staying outside the WTO, the countries' trade partners would be in the position to apply discriminatory tariffs against non-members. In addition, non member countries would have to negotiate border measures with their partners bilaterally or regionally and may be exposed to undue negotiating strength of their partners. The

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[41] Fukasaku, Kiichiro,(2000) pp. 4-11

[42] ibid

[43] Langhammer,Rolf J. and Matthias Lucke,(2000)

[44] In practice countries have been often benefited from reductions of MFN rates even if they remained outside the GATT/WTO. In such situations the main benefit of joining the WTO would be the certainty and predictability of such benefits, which are by no means guaranteed for outsides.

multilateral trading system is, therefore, particularly important for small countries which have a limited power to exploit their (small) size to improve their terms of trade. Their impact on terms of trade may be enhanced if terms of trade (and, therefore, world prices) are negotiated on a multilateral level.

The beneficial effect of the WTO on the credibility of government policies could be another benefits. Governments often face a "credibility gap" in trying to convince foreign and domestic investors, and the rest of the business community about their commitments to particular polices. By framing the countries' concessions into legal commitments, the WTO membership provides powerful guarantees of governments' policy directions. Unlike in the case of unilateral policy reforms supported by multilateral commitments are more credible, in particular because of the strategic interaction between government and private sector which makes the agreement attractive. In this setting, governments use international trade agreements to enhance the credibility of their policy choices with respect to the private sector. The "credibility gap" is particularly important and present in the case of many if not most transit and less developed countries.

The third reason is the beneficial effect of the membership on domestic policies and institutions involved in the conduct of international trade. Acceding countries are required to put in place a set of norms and institutions, which support the liberalization of markets and increase transparency and promote the rule of law, contract enforcement and the evaluation of an independent judicial system. In principle, nothing would prevent governments from putting in place these norms and regulations on a unilateral basis. The role of the WTO in this process is to facilitate the introduction of effective reforms not only by reinforcing the credibility of the government's trade policies but also help

introduce the policies that are based on best-practices and that must be harmonized[45].The fourth reason why the WTO is considered to play an important and positive role is its contribution to the predictability, security and transparency of market access[46].

The fifth reason is tied to the WTO's dispute settlement mechanism. The possibility of resolving dispute through the dispute settlement mechanism may appear, in particular to smaller and "Weaker countries", as one of the most tangible benefits from WTO accession[47]. There are very few effective vehicles to resolve international trading dispute outside commercial arbitration, and those that exist can pity small trading nations against big ones. The WTO dispute settlement mechanism provides a uniquely fair, accessible and effective opportunity to each WTO member.

WTO membership including the process of accession, leads to sizeable technical assistance in the form of training with respect to the legal framework of the multilateral trading system and its economic underpinnings. Such human capital is indispensable for building up institutional infrastructure, in particular for anchoring private property rights. WTO is institutionally prepared and financially endowed to help LDCs to form human capital in trade policy formulation and trade diplomacy that can also be used for other legal issues[48].

The seventh point could be WTO membership encourages LDCs to open their domestic markets even if they can take a free rider under "special and differential treatment" for a certain period. Apart from the medium term allocative efficiency gains of import market opening in terms of lowering the implicit tax on exports and stimulating resource

[45] Fukasaku,Kiichiro (2000) pp.21-27
[46] ibid
[47] Murshed,S.Mansoob (1999)
[48] Langhammer and Lucke (2000)

reallocation and export diversification, import market opening implies a concrete short-term gain: domestic prices of imports will often fall by more than the experience of sub-Saharan Africa [49]that countries with high tariff levels also pay higher CIF (Cost – Insurance –Factor) prices for imports because restrictive tariff regimes are inextricably intertwined with rent seeking activities of traders and domestic procedures(if the later exists) [50].

Finally, the opportunity for acceding countries to shape the further rules and disciplines of the WTO is cited as a benefit. Acceding countries will undoubtedly be interested in participating actively in subsequent multilateral trade negotiations since only through direct negotiations rather than through an oversight from sidelines may they hope of protecting their interests[51].

2.4.1.2. Costs

The fiscal costs of reducing import tariffs may be significant because taxes on international transactions are a major source of government revenue in many LDCs. This may be less of an issue in the early stages of trade liberalization when non-tariff barriers are tariffied and prohibitive tariffs are lowered and imports increase. In the medium to long run, however, substantial reductions in average tariff rates require a broadening of government's tax bases. In the meantime, LDCs may need to concentrate on reducing the dispersion of tariff protection across commodity groups in order to eliminate the resulting distortions, while reductions in the average level of protection remain limited by fiscal considerations[52].

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[49] Yeats(1999)
[50] ibid
[51] Furkasaku, Kiichiro (2000)
[52] Murshed(1999)

A more liberal trade regime encouraged by WTO membership may expose companies in LDCs to stronger competition from abroad, often from more advanced developing member states rather than from OECD countries. The result may be a short-term deterioration of the current account since higher imports due to market opening materialize faster than higher exports due to imported market access abroad. The external vulnerability of countries may thus be aggravated if the time lag between the two effects cannot be shortened. In any case, least developed countries (LDCs) can resort to long adjustment periods as they accede to the WTO[53].

Sovereignty is curtailed and short-term manoeuvring in trade related polices is discouraged and also restricted, even for developing economies that invoke special and differential treatment. Politician and interest groups who are used to acting selfishly will take the political cost involved in 'tying their hand' seriously[54].

There are economic costs in terms of the opportunity costs of employing high skilled personnel for the implementation of WTO commitments and active participation in WTO negotiations. Using this particular scarce resource- provided it is available- in Geneva precludes its use at home and in other activities, perhaps including the private sector. During GATT times, the performance of skilled personnel playing in the 'theatre of trade diplomacy' was often belittled. Today, under the WTO with its multifaceted tasks to secure market access rather than only trade liberalization, there is every reason not to belittle active participation in WTO negotiations. Although training facilities are provided through external technical assistance especially for personal from LDCs, the true opportunity costs arise in the aftermath of training when such personnel could

[53] ibid
[54] Wang and et al (1998)

likewise be employed productively in other activities. The proposal to economies on scarce human resources by bundling them regionally among serial developing country partners encounters a lack of political will on the part of governments to surrender national sovereignty[55].

Moreover, J. Michael Finger and Philip Schuler (1998) attempted to present a first approximation of the investments needed to implement WTO obligations on SPS, IPR (Intellectual Property Rights) and custom reforms in order to ensure that implementation benefits the country. Accordingly, to gain acceptance for its meat, vegetables, and fruit in industrial country markets, Argentina invested over US $80 million in achieving higher level plants and animal sanitation. Hungary spent more than US $ 40 million to upgrade the levels of its slaughter house alone. Mexico spent over us $30 million to upgrade intellectual properly laws and enforcement. The authors also identified 16 elements in custom reforms, each of which can cost more than US$2.5 million to implement. Although the amounts will vary by country, the totals involved in effective implementation of WTO agreements can exceed the annual development budget of LDC's.

[55] Fukasaku (2000)

2.4.2. Review of Empirical Literatures

One of the prime objectives of the WTO is to smooth trade flow and improve market access by lowering tariffs as well as non-tariff barriers and by helping with dispute settlements. It is argued that since the establishment of the GATT/WTO international trade has significantly increased. As the WTO report stated "the achievement of the system are well worth celebrating ...during 50 years of GATT/WTO operations ,world trade has increased 16 folds...merchandized exports grew on overall 6% annually. .....GATT and WTO has helped to create a strong and prosperous trading system contributing to unprecedented growth[56]."

However, not everyone share this optimism. Langhamer and Lucke (2000) studied accession issues for vulnerable economies. They concluded that the benefits springing from WTO membership in terms of improved market accesses for traditional exports are likely to be limited, given such characters as reliance on a small number of exports goods (mostly raw materials), weak administrator capacities, large economic vulnerability, lack of market-oriented capacities and political instability. Instead Langhammer and Luke argue that the main gains would come from market-oriented policies and sending positive signals to foreign investors.

Moreover Jensen ,Rutherford and Tarr (2002) in their work on " Economic Wide and Sector Effects of Russia's Accession to WTO " argue that the main trade partners of Russia already employ quite low import tariff ,and those the MFN mechanism will not bring significant additional benefits. According to their estimates, 70% of the gains in the long term should come from increased foreign investments. Other important factors are improved resource allocation and better dispute settlement mechanisms .Rose in his

[56] WTO (1998)

series of papers[57] undertook research on the beneficial consequences of WTO membership (and the membership of its predecessor the GATT) using conventional econometric tools to assess these claims. In one study he found no statistically significant effect of GATT/WTO membership on the value of bilateral trade flows over a fifty year period, a finding he regards as mysterious.[58] Rose concludes that"...membership in the GATT/WTO has systematically played a strong role in encouraging trade." Moreover, in his another study he showed that there is little evidence that membership in the GATT/WTO has actually liberalized trade policies[59]. In another study, he also found that GATT/WTO accession increased the value of bilateral trade flows, but WTO membership itself does not[60]. Moreover, GATT/WTO membership was found in a third study not to have a statistically significant effect on the volatility of trade flows, as measured by the coefficient of variation of bilateral trade flows over a twenty five year period[61]. In these three studies GATT/WTO membership is captured in econometric specifications by the use of dummy variables, rather than directly identifying the changes in trade policies that followed from membership or accession.

These findings have prompted others to re-visit the question he posed and the methods he employed. Subremain & Wei (2003) diverges from Rose's earlier articles (2002 a, b) in two respects. First, they differentiate between the effects of GATT/WTO membership on industrialized and developing countries. More generally they note that there is no presumption that the effects of GATT/WTO membership are common across all goods & trading partners; hence calling in to question the pooling of certain types of trade data.

[57] Rose. (2002a.2002b,2003,2004)
[58] Rose (2002a)
[59] Rose (2002 b)
[60] Rose (2003)
[61] Rose (2004)

Second, they employ some of the latest techniques for estimating bilateral gravity equations which try to control for country-specific characteristics[62]. These two departures appear to have led to substantially different findings. Subramanian and Wei find that WTO membership raised trade between industrial countries by forty percent, where as such membership only increased a developing country's trade if it joined the WTO after the completion of Uruguay round. Asymmetric results were found across sectors and GATT/WTO membership is associated with greater effects on goods trade (which typically face lower trade barriers than other sectors). The authors note that these findings are consistent with the reluctance of industrialized economies to liberalize trade in food and clothing under auspices of the GATT and WTO, and the fact that developing countries of the GATT and WTO, and the fact that developing countries were not asked to undertake many liberalizing commitments before the completion of the Uruguay Round.

Lissovolik and Lissovolik (2004) found that controlling for gravity equation variables and country specific effects, Russia's export to WTO members from 1995 to 2002 were smaller than those to non members. Rather than immediately attribute the export under-performance to Russia's non-membership of the WTO, Lissovolik and Lissovolik consider four potential explanations for this finding. Only one such explanation (the nature and extent of Russia export controls) survive scrutiny and authors' qualify their conclusions accordingly.

On the other hand, economists draw upon the insights of the international relations literature to assess the effects of international institutions on trade patterns[63]. They note

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[62] Anderson and Van Win coop (2003)
[63] Goldstein,Rivers,and Tomz (2003)pp.14-26

that many customs territories (which need not be nations) participated in the GATT and WTO before formally becoming members of these institutions. The date of accession, therefore, may not accurately reflect the point at which a nation begins to align itself with multilaterals trade rules. Another interesting observation is that the effects of GATT and WTO membership is likely to be conditional on prevailing preferential trading arrangements and on the nature and history of certain state- to -state ties, such as former colonial links. The authors' also under take gravity equation analysis and find that, although the GATT/WTO appears to have increased trade among members, these institutions have contributed to faster growth of trade among non-members.

Turning to the perspectives of the legal comments, it is generally believed that economies that join the WTO later are being asked to comply with more obligations than early entrants[64]. Commentators on accession have claimed that price being asked is "too high" and the task "too demanding". Example, Van Grasstek uses "three dimensional analysis of multilateral trade diplomacy" to argue that demands on ascending countries, have been increasing over time.

Finally, country specific research on WTO accessions has almost exclusively focused on the important case of china. As a result, little is known about the impact on economic performance and social well-being of the other economies that have joined the WTO since 1995. The paucity of studies on WTO accession is particularly unsatisfactory as many economies especially LDCs are currently seeking to join the WTO. The vacuum left by the dearth of empirical evidence raises has been filled by doubts about the case for opening markets and taking WTO obligations and negotiations seriously. It also begs further questions for developing economies, especially LDCs which have been

[64] Van Grasstek (2004)

encouraged to use the WTO as a forum to structure national development efforts. This paper builds on these studies, yet departs from them in a number of respects. I too employ gravity equation approach to estimate the relative contributions of the WTO membership to national exports growth.

2.5. **Review of Literature on Ethiopia**

Few empirical studies has been undertaken on the consequences of Ethiopia's accession to WTO on her economy in general and foreign market access in particular. The Diagnostic Trade Integration Study using CGE model by international consultant and local specialists showed that a 50 percent reduction of tariff and subsidies by all WTO members may on average be able to change the welfare of the poor by 0.03 and 0.01 percents, respectively. Moreover, it further stated that: "... there would not be an immediate benefit except to signal to international community that Ethiopia's trade regime is bound to the international rules of the game[65]."

As part of the world bank/IMF led orthodox SAP, a number of macroeconomic and trade liberalization policies was undertaken, including significant reduction of tariffs and removal of non-tariff barriers. Therefore, it is argued that the unweighted average tariff rate is in the order of 17.5 percent while the maximum is about 35 percent[66] . To this effect, some argue that Ethiopia has reduced its tariff substantially and "has already undertaken reforms that are consistent with WTO rules and disciplines such as non-discrimination and reduction of qualitative restrictions to less than 2 percent of imports"[67] which could bring about earlier benefit when it joins the WTO.

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[65] WB, (2003) P.7
[66] ibid
[67] Ibid p.7

However, others argue that with many suppliers of an agricultural raw materials to limited international markets, substantial price increases is unlikely to happen, particularly in the short run. Moreover, in light of the frequently recurring drought, Ethiopia's experience demonstrated that it can not regularly supply given volume of agricultural goods to the export markets[68].Another study by Anteneh (2004) suggests that it is not economically rational decision for Ethiopia to join WTO as the costs outweigh the benefits to be gained as a result.

Finally, Pohl Consulting and Associates in its studies using dynamic CGE model under different Sanarios indicated the impact of reducing and /or dismantling TB and /or NTB[69]. The main impact of trade liberalization process they found mainly fiscal, stressing that the Ethiopian government will have to rapidly find ways to keep to amounts of tax revenues stable in order to maintain the level of investments that would sustain economic growth. The present research, therefore, focuses on investigating the effect of Ethiopia's accession to WTO on its exports using gravity equation.

[68] Michael Keyzer, Max Merbis,Geert Overbosch (2000)
[69] Pohl and Consulting and Associates (2005)

CHAPTER THREE

3. Ethiopia's Trade Regime and Its Prospects Resulting from WTO Accession

In this chapter, trade regimes of Ethiopia with special emphasis to export sector, preferential markets currently enjoyed by Ethiopia and possible policy change resulting from WTO accession is thoroughly discussed and analyzed.

3.1. Ethiopia's Trade Regime

Ethiopia is an agrarian economy with very small industrial base. Hence, the performance of the e economy as a whole is largely influenced by what happened in the agricultural sector. Agriculture accounted for about 74%, 62%,50%,45.1%,39.4% and 42.1% of GDP in 1965,1978,1988,2001,2003 and 2004, respectively[70].This declining trend conveys as if structural transformation has been taking place. Nevertheless, the age old contribution of the sector in foreign exchange earnings and employment generation remained stagnant at around 90 and 80 percents, respectively[71].

On the other hand, as indicated in the introductory part, trade if well managed, is believed to play an important role in transforming an economy from agrarian to industrialized one. Hence, in the following section brief review of Ethiopia's past and current trade regimes are made to show her past and current foreign trade policy.

3.1.1. Pre-1974/75

During this period the foreign trade was governed by a relatively free market oriented policies with private sector (mainly foreign capital) occupying lion's share in both export

[70] Various NBE annual reports.
[71] Ibid

and import activities. However, 1960 on wards the government followed an in-ward looking strategy[72]. The tools used for inward looking were overvalued exchange rate, which help importers to import cheaply by taxing exporters implicitly, high tariff rates, foreign exchange control and non tariff barriers such as restrictions on some items and heavy tax on export[73].

The major destination during this period was the USA, occupying about 35.6 percent of the country's exports on average. Germany (8.8percent), Italy (7.2 percent), and Japan (6.5 percent) were the other important markets for Ethiopian exports. Export to Russia and Yugoslavia account for about 1.52 percent and 1.28 percent, respectively[74].

During the imperial period most export business was under taken by foreign businessmen with a lot of under-invoicing practice. According to a study of MoTI, 68 percent of export sector investment was occupied by foreigners and the then under- invoicing practice was widespread hammering the reported export value during the period. In the four year period priori to 1974/75, the average export value was around USD 201.4 million. The export to GDP ratio was 7.1 percent[75].

3.1.2. The Period 1974/75 – 1990/91

It is stated that the export objective of the ten years perspective plan of the Dergue regime were increasing foreign exchange earnings, reducing the dependence of the country's export sector on limited export markets, increasing the amount and composition of manufactured exports and increasing the socialization of the export sector[76].This regime highly restricted the private sector participation in the export sector in particular the

[72] Imperial government of Ethiopia ,The second five year development plan (1962-1966)
[73] MoTI (2003)
[74] Ibid
[75] NBE annual report (2003/04)
[76] Provisional Military Government of Socialist Ethiopia,1985

economy at large. Its overall policies were expanding collective and public enterprises and manage the economy through central planning. Like the Imperial, this period was inward looking behind highly protective tariffs and quantitative restrictions.

The regime planned the reduction of the share of the traditional export commodities (coffee, hides and skins, oils seeds and pluses) from its level of 73.5 percent in 1984/85 to 53.2 percent in the end of the plan period[77] .The other effort considered relevant for export was the directive issued to ban the export of raw materials of hides and skins.

During this period export structure was characterized by increased coffee and hides and skins export shares offsetting part of the significant slowdown in oilseeds and pluses export[78]. The coffee sector has received greater attention by the government as evidenced by the establishment of both large state farms in potential coffee growing areas and the government owned Ethiopian Coffee Marketing Corporation. This led to a jump in the value of coffee export from an average level of USD 85.8 million in pre- 1974/75 period to USD 227.7 million and its share from the total value of exports went- up from 45.7 percent to 61.6 percent in the period under review[79].

Another development during this period was the establishment of large tanneries in different parts of the country explaining the improved export performance in this sector[80]. Other export markets in order of their export share include Germany (18.1 percent) Japan (9 percent), Saudi Arabia (7.7 percent), Italy (7.2 percent), and Djibouti (6.9 percent).Benefiting from the then bilateral trade agreements export to Russia and Yugoslavia account for about 3.6 percent and 1.5 percent, as opposed to the pre 1974/75

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[77] Ibid
[78] Various NBE Annual reports
[79] Ibid
[80] MoTI (2003)

level of 1.5 and 1.3 percent, respectively. France appeared to be an important market for Ethiopian products as its market share increased from the pre-1974/75 level of 2.9 percent to 4.2 percent. The average export to GDP ratio in percentile during this period was 6.8.

3.1.3. The Post 1991/92 Period

The economic policy of the TGE acknowledged the importance of increasing and diversifying the country's exports to ease foreign currency shortages along a free market-based economic path[81]. By minimizing the role of the state in foreign trade sector and by ensuring adequate private capital participation in the export business, the government aimed an increasing export and foreign exchange earnings. To this end, measures such as provision of fiscal incentives to exporters, the replacement of quantitative restrictions with tariffs, encouraging export-oriented investment, minimizing administrative and bureaucratic procedures and promotion of the use of trade information were taken. As the focus of the paper is on current Ethiopia's trade policy, looking at her import and export policies in more detail is important.

3.1.3.1. Import Sector

Following the 1991 declaration of TGE's market oriented economy, Ethiopian foreign trade policies are deducted from ADLI. To this effect, a comprehensive trade reform program aimed are dismantling quantitative restrictions and gradually reducing the level and dispersion of tariff rates was under taken[82]. The negative list used to determine eligibility for imports through the foreign exchange access was reduced significantly. Currently, quantitative import restrictions are applied only to used clothing, harmful

[81] TGE,1991
[82] WB (2003)Diagnostic Trade and Integration Study

drugs, and firearms[83]. Both tariff levels and their dispersion have been reduced significantly. As a result of the reforms, tariff rates narrowed down from pre-reform zero to 240 percent to zero to 80 in 1995 and then to zero to 35 in 2002[84]. The average (unweighted) tariff rate declined from 28.9 percent in 1995 to 17.5 percent in 2002. The implicit import duty rate (import duties collected as a percentage of total CIF[85] imports) declined from over 23 percent in mid 1990s to 12 percent by 2001/02[86]. Effective rate of protection[87] estimated using the input-output tables for sub-Saharan Africa countries used in GTAP database concluded that "effective rates of protection exceeds nominal rates of protection such that the evaluation of the protective structure based only on nominal rate understates the extent of protection accorded many activities[88]."

Moreover the estimates point to a clear incentive bias in the protection structure in favor of manufacturing against agriculture. This anti agricultural bias in effective protection has largely been the outcome of high protection enjoyed by input supplying manufacturing industries. It also indicated the presence of the high protection of some imports and the bias against exports could potentially contribute to appreciated real exchange rates.

Hence, during negotiation for accession to WTO, one of the requirements for Ethiopia may be to reduce the tariff rate to the acceptable level by the WTO member countries.

[83] ECA,(2004)
[84] Ibid
[85] Cost, insurance and importing country's port
[86] WB (2003) Diagnostic Trade and Integration Study
[87] Effective rate of protection refers to a measure of the protection afforded by an import restriction calculated ad percentage of the value added in the product concerned. It takes into account the protection on output and the cost raising effects of production inputs. They employed $ERP_j=[t_i-\sum(a_{ij}* t_i)/(1-\sum a_{ij})]$,where t_i and t_j are the normal (schedule) tariff rates on given industry and input supply respectively ,and a_{ij} is the input coefficient indicating the share of industry I's production used as inputs for industry j's output.
[88] Ibid

This acceptable level may be gauged by taking the existing bound and applied rates as a guide.

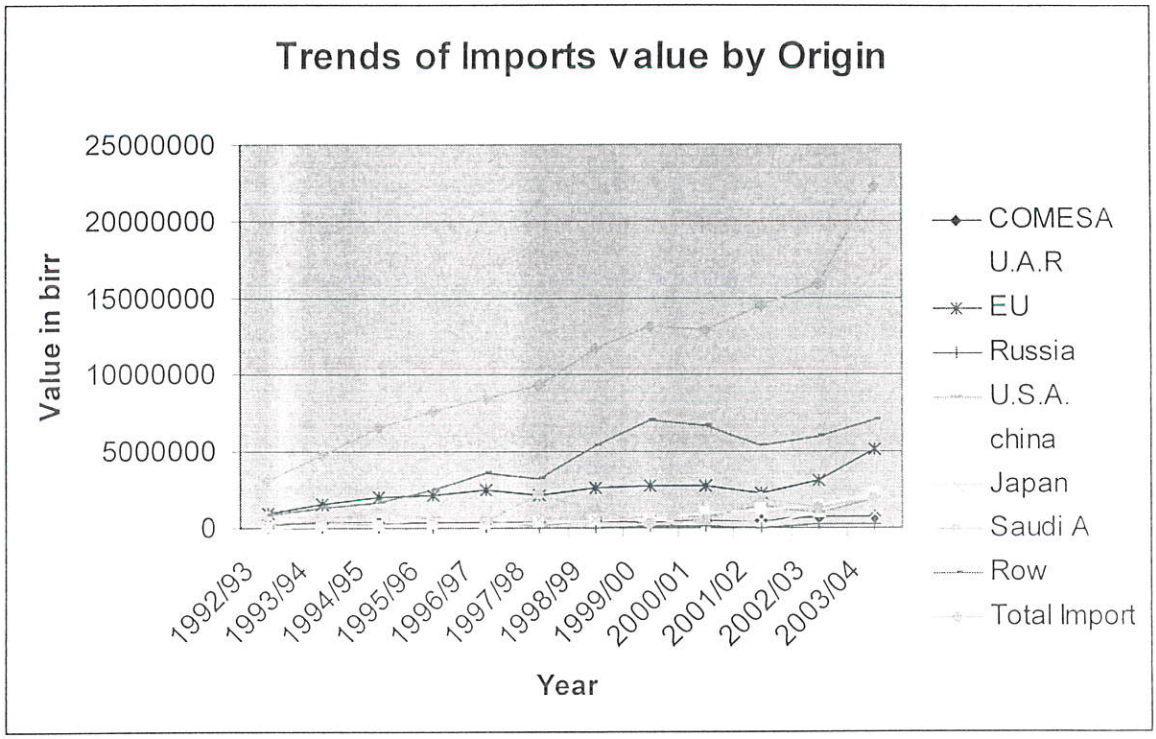
Table3: Post Uruguay Round Applied and Bound Rates of Industrial and Developing Economies by Major Product Group (in percentage)

Serial No.	Product Group	Industrial Economies		Developing Economies	
		Applied	Bound	Applied	Bound
1	Agriculture excluding Fish	5.2	7.2	18.6	19.9
2	Fish & Fish Products	4.2	4.9	8.6	25.9
3	Petroleum	0.7	0.9	7.9	8.4
4	Wood, Pulp, and Furniture	0.5	0.9	8.9	10.3
5	Textiles and Clothing	8.4	11.	21.2	25.5
6	Leather, Rubber and Footwear	5.5	6.5	14.9	15.4
7	Metals	0.9	1.6	10.8	10.4
8	Chemical & Photographic Sup.	2.2	3.6	12.4	16.8
9	Transport Equipment	4.2	5.6	19.9	13.2
10	Non Electrical Machinery	1.1	1.9	13.5	14.5
11	Electrical Machinery	2.3	3.7	14.6	17.2
12	Mineral Products and Metals	0.7	1.0	7.8	8.1
13	Manufacturers, not elsewhere Specified	1.4	2.0	12.1	9.2
14	Industrial Goods row (4-13)	2.6	3.5	13.3	13.3
15	All Merchandise Trade	2.6	3.7	13.3	13.0

Source: Bernard and et al (2002): Development, Trade & the WTO P: 98

Therefore, as one can observe from the above data, Ethiopian simple average tariff rate is greater than the average rate of both developing and industrial economies average tariff rate (as compared to both applied and bound tariff rates). Turning to Ethiopia's import by country of origin, during the period 1992/93-2003/04 fiscal years EU member countries remained her major import commodity suppliers followed by Saudi Arabia.

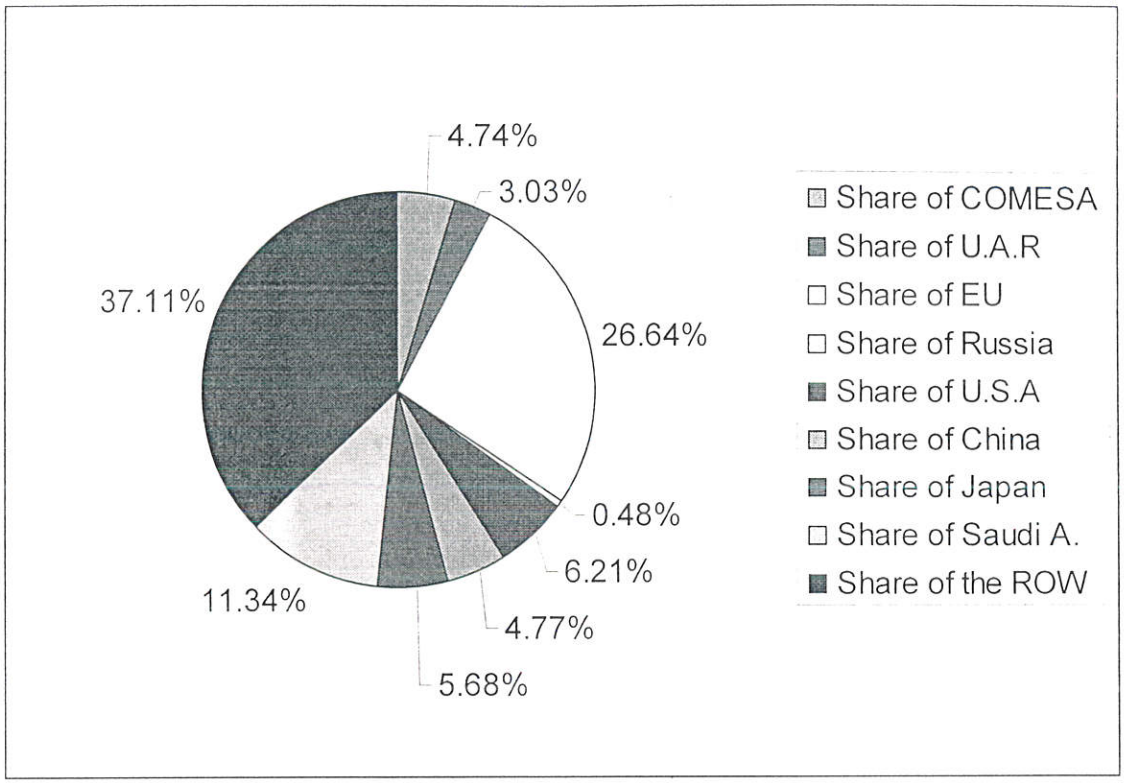
Figure 1: Trends of Ethiopian Imports by Country of Origin from 1992/93-2003/04



Source: Computed, from NBE Annual Report

During the period, imports from European Union member countries , Saudi Arabia, USA, Japan, China, COMESA member countries and United Arab Emirates on average share about 26.64%,11.34 %,6.21%, 5.68%, 4.77%, 4.74% and 3.03%, respectively. The following figure shows average share of Ethiopian imports by country of origin for the last thirteen years.

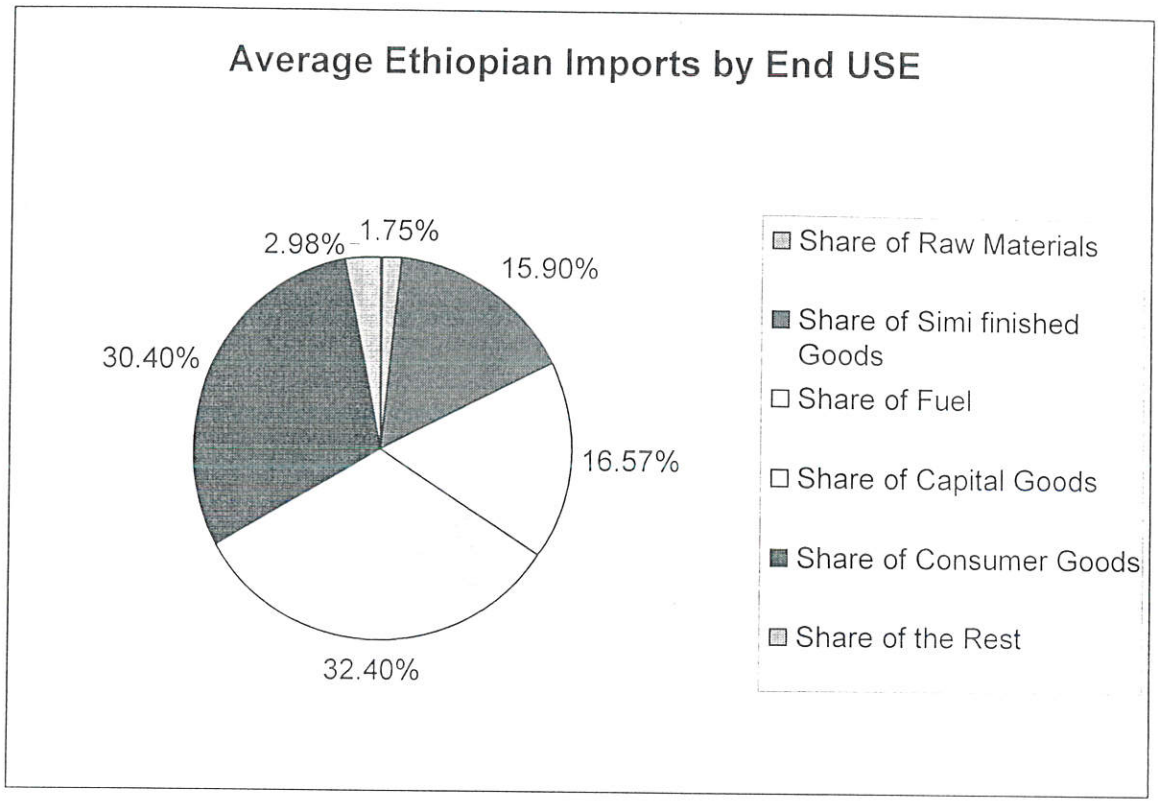
Figure 2: Average Ethiopian Imports by Country of Origin from 1992/93-2003/04



Source: Computed, from ECA and NBE Annual Reports

Raw materials, semi finished goods, fuel, capital and consumer goods are the major Ethiopian imported goods. In 1990/91, share (as a percentage of total imports) of semi finished goods, fuel, capital and consumer goods were 11.13%, 9.85%, 46.19% and 30.19%, respectively. The share of the same goods in 2003/04 was 16.82%, 12.01%, 33.89% and 34.62%, respectively. The average share of these goods for the last thirteen years were 15.90%, 16.57%, 32.40% and 30.40%, respectively.

Figure 3: Average Ethiopian Imports by End Use from 1992/93-2003/04



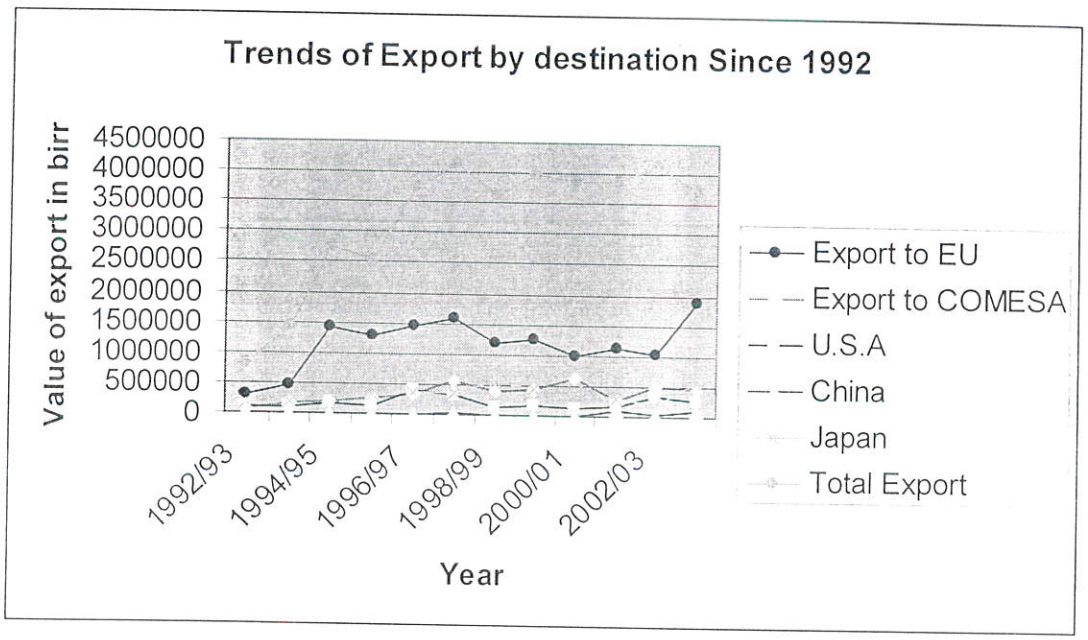
Source: Computed, from NBE Annual Report.

3.1.3.2. The Export Sector

In October 1992, IMF and WB supported structural adjustment program was launched whose basic role in the exchange and trade system was to strength incentive for diversified export production thereby attracting foreign exchange flows away from parallel markets. Pursuant to new economic policy and the associated SAP, a bunch of policy measures targeted at stimulating export growth have been in acted. These include: export licensing procedures were streamlined and the bureaucratic trade licensing chains were practically abandoned, devaluation of the Birr and step by step liberalization of the foreign exchange markets, with the view of enhancing export competitiveness all taxes on exports (expect coffee) and subsidies to exporting enterprises were abolished. As of

December 1992 and as of April 2001 exporters were waived from the 6.5 percent coffee export tax when coffee export price is below 105 US cents per pound for washed and below 70 US cents per pound for unwashed[89]. In order to facilitate exporters' access to bank credit thereby exploiting bona fide export orders and enhancing the competitiveness of exporters in the international market, an export credit guarantee scheme was introduced since1999[90].

Figure 4: Trends of Exports of Ethiopia in Thousands of birr



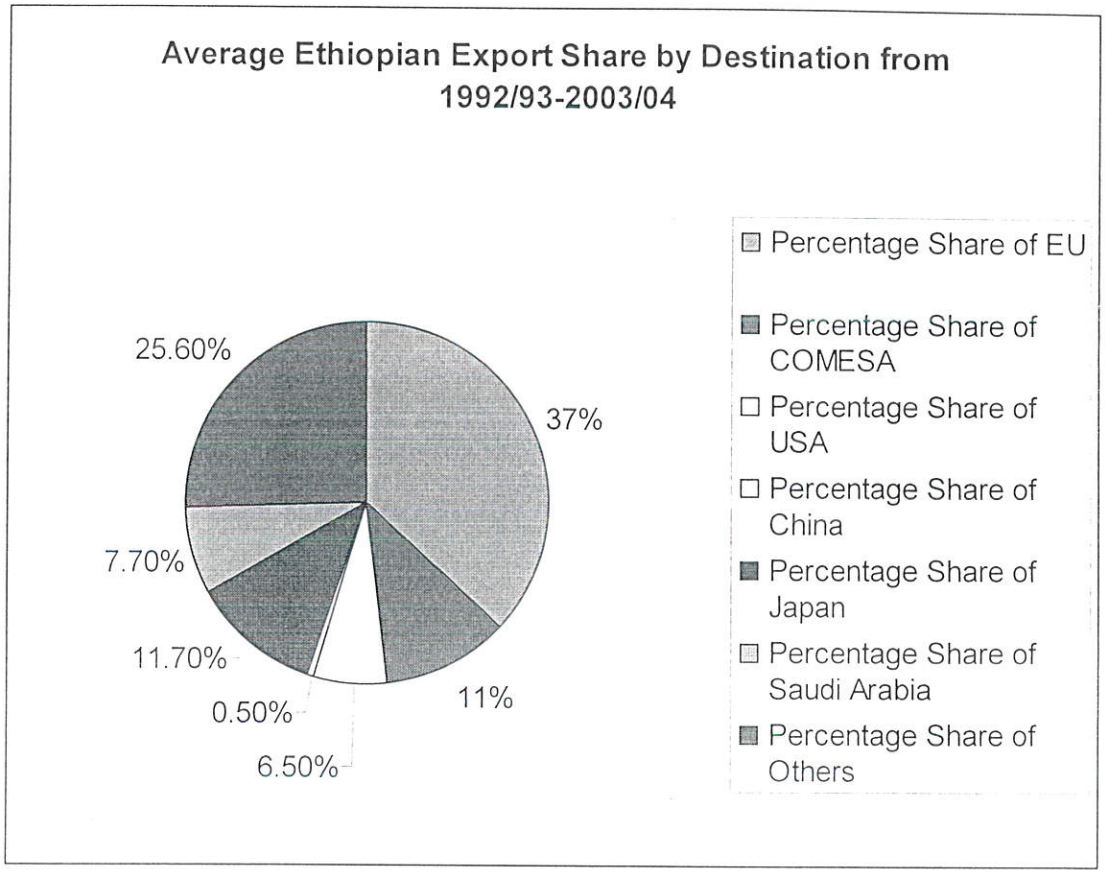
Source: Complied from Various NBE Annual Reports

Turning to performance of the export sector during this period, as depicted in figure 4 its growth is not stable. Moreover, in terms of market concentration EU member countries remained as the main importers of Ethiopian exports followed by Japan. COMESA member countries and Saudi Arabia imported on average 11% and 7.7% of Ethiopian

[89] Ministry of Trade and Industry (2003)
[90] Ibid

exports during this period. Export contributed 7.24% to GDP on average, which is a little bit higher than its contribution during the period 1974/75-1990/91.

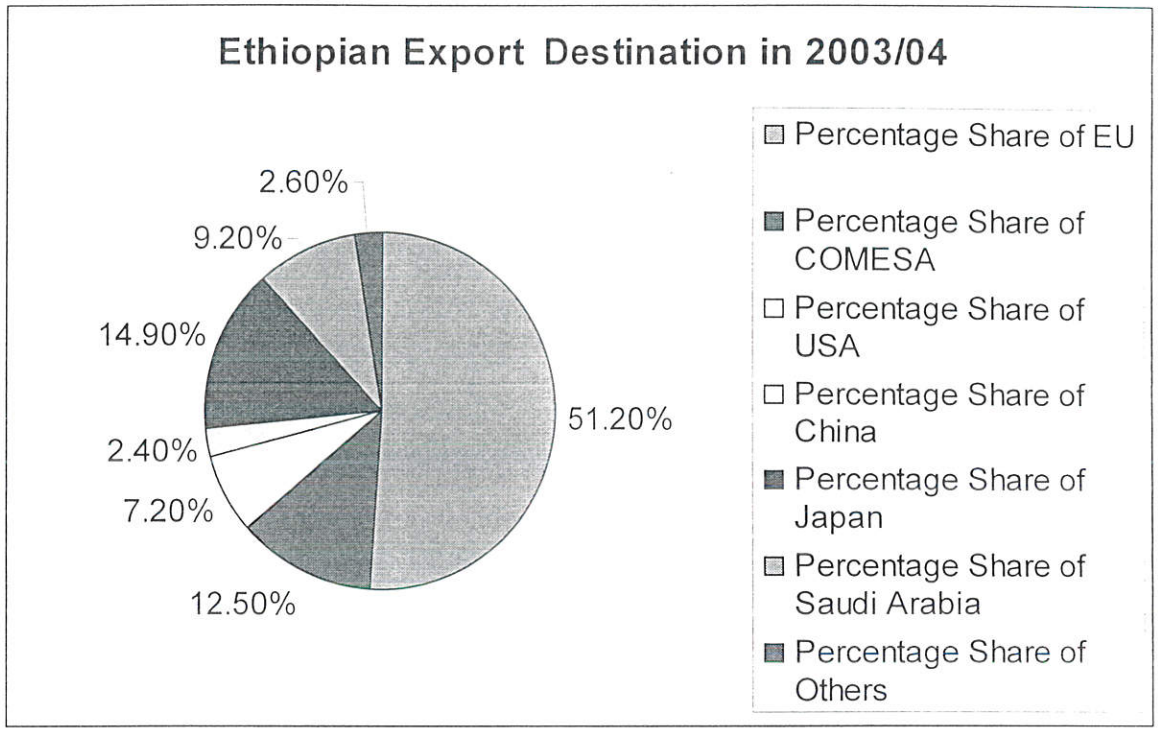
Figure 5: Ethiopian Export Value by Destination (in Percentage Share) from 1992/93-2003/04



Source: Computed, from ECA and NBE Annual Report

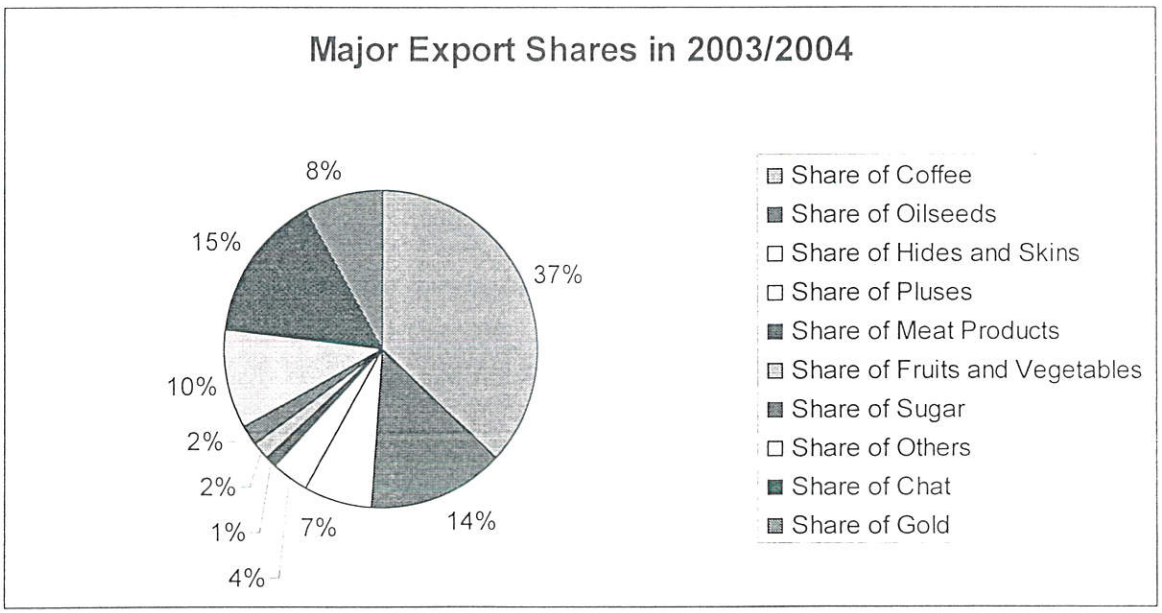
In 2003/04 the EU member countries share of Ethiopian commodities import increased to 51.2% of the country's total export. Japan, COMESA, Saudi Arabia, USA and China registered market share of 14.9%, 12.5%, 9.2%, 7.2%, and 2.4% of Ethiopian exports during the fiscal year, respectively.

Figure 6: Ethiopian Export by Destination in 2003/04 Fiscal Year



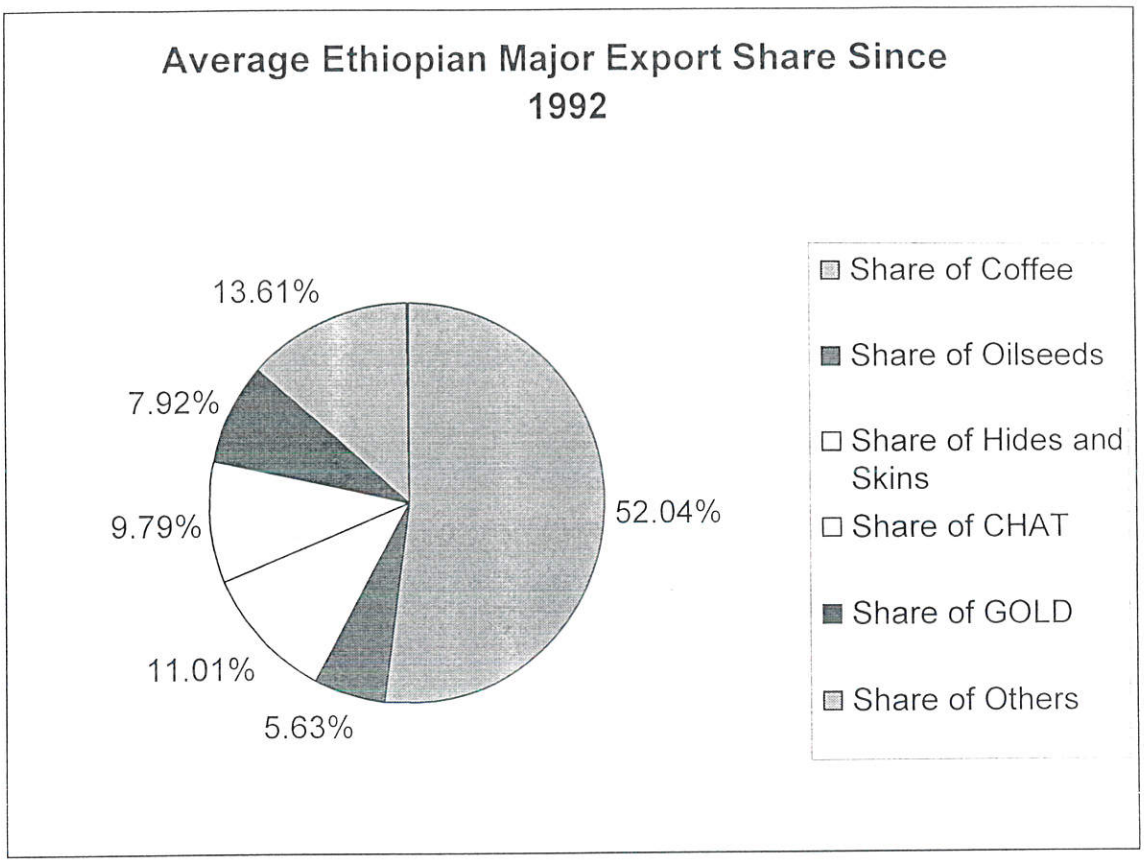
Source: Computed from NBE Annual Report, 2003/04

Figure7: Ethiopian Major Export Commodities Share in 2003/04



Source: Computed, from ECA and NBE Annual Reports

Figure 8: Average Ethiopian Export Share of Major Commodities from 1992/93-2003/04



Source: Computed, from Various NBE Annual Reports and ECA

Coffee was still the dominant export commodity accounting for about 52.04% of the country's exports followed by hides and skins (11.01%), Chat (9.79), Gold (7.92%) and oilseeds (5.63%). The share of coffee during this period showed a decline from 61.4% (as compared to the period 1974/75-1990/91) to 52.04%. Therefore, in terms of diversification Ethiopian export still concentrates on few commodities.

3.2. Assessment of Ethiopia's Current Preferential Trade Agreements

In addition to bilateral trade Agreements made with her trading partners from time to time, Ethiopia is currently enjoying various preferential trade arrangements. These include Generalized System of Preference (GSP), European Union African Caribbean

Pacific Economic partnership Agreement (EU-ACP EPA), Everything But Arms (EBA), and Africa Growth Opportunity Act (AGOA). Therefore, in this section, a brief discussion and analysis of these market accesses will be made.

3.2.1. Generalized System of Preference (GSP)

The notion of providing trade preferences for development purposes has its origins in Prebisch and Singer's work on the secular decline in the terms of trade for agricultural commodities and the perception that only manufacturing could provide stability and jobs in developing countries[91]. The Prebisch-Singer hypothesis[92] led to two important policy prescriptions: sectoral intervention favoring import-competing manufacturing industry (import substitution industrialization) and the idea of creating non reciprocal tariff preferences to foster manufactured exports from the developing countries. In the latter case the GSP is the most extensive and explicit expression of an attempt to use trade preferences as a tool of development but today there a number of other schemes limited to sub-group of developing countries, with varying product coverage and preferential arrangements. Juridically, preferences for LDCs form a sub- set of the GSP while other unilateral preferences depend on explicit waivers of WTO rules. The GATT 1947 had no provisions for special arrangements to help developing countries through trade[93]. However a number of provisions were added in 1965 for example, Article XVIII, Article XXVIII and part IV on Trade and development which recognized the need for a rapid and sustained expansion of the export earnings' of the developing countries and exhorting 'positive efforts designed to ensure that (developing countries) secure a share in the

[91] The History of UNCTAD (19964-84)
[92] Prebisch-Singer Hypothesis postulates that the terms of trade of primary products, the chief exports of LDCs, had been declining over time and would continue to do so, and that this phenomenon was due to causes which were exogenous to the policies of the LDCs themselves.
[93] Laird and et al (2001)

growth of international trade, commensurate with the needs of their economic development's by developed countries. Part IV also recognized the needs to provide in the largest possible measure more favorable and acceptable conditions of access to world markets for their limited range of primary exports, including measures to attain stable, equitable and remunerative prices.

In parallel Prebisch proposed the GSP at UNCTAD I in 1964. The arguments were essential: MFN treatment didn't provide equality with domestic producers or regional trade partners unless set at zero; MFN treatment didn't take account of inequality in economic structural and levels of development; and because negotiations were conducted on the basis of reciprocity and the MFN principle, developing countries' exports continued to face high tariffs. Prebisch's proposals were subsequently adopted as a principle at UNCTAD II in New Deli in 1968. The compromise was that the conference agreed that "the objectives of the generalized, non reciprocal, non discriminatory system of preferences in favor of developing countries should be : (a) to increase their export earnings, (b)to promote their industrialization and (c) to accelerate their rates of economic growth.[94]" I t was also recognized that special preferences should be granted to the less advanced developing countries would not offer 'conventional reciprocity' as a result of preferences they would be able to import more than if the preferences had not been granted.

In order to allow the GSP system to become legally operational, on 25 June 1971, the GATT contracting parties decided to waive the provisions of Article I of the GATT for a period of 10 years to the extent necessary to permit contracting parties to accord preferential tariff treatment to products originating in developing countries and territories. The decision refers to 'generalized, non-reciprocal, non discriminatory preferences

[94] Ibid p. 8

beneficial to developing countries'. Finally, on 28 November 1979, following the conclusion of the Tokyo Round in one of the framework agreements' the contracting parties adopted the decision on differential and more favorable treatment, reciprocity and fuller participation of developing countries (the 'Enabling Clause[95]') which provided a legal basis (other than a waiver) for the granting of trade preferences, tariff and non tariff mechanisms, by developed contracting parties in favor of developing countries, and special treatment of the LDCs, in the context of any general or specific measures in favor of developing countries. The enabling Clause as a decision of the GATT contracting parties became part of the WTO system under provisions of paragraph one of the GATT 1994. The enabling clause therefore constitutes the legal basis by which individual WTO members may unilaterally grant GSP preferences to developing countries[96].

Based on the permissive rather than mandatory language of the decision, preference givers usually consider that they may also unilaterally modify extend or withdraw such preferences including the coverage of beneficiaries. Developing countries often argue that this creates a degree of uncertainty about the scope and duration of preferences mitigating the benefits. That is, it has always been a purely concessionary scheme on the part of the industrial countries and is in no way contractual. This has inevitably caused uncertainty about the permanence of the concessions, something which has hardly encouraged long term investments in beneficiary countries. Another of the principal criticisms has always been the degree of effective coverage of exports. In general terms,

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[95] Enabling Clause is 1979 GATT Decision 'Differential and More Favorable Treatment, Reciprocity and Fuller participation of developing countries'. One of the so called Framework agreements, it enables WTO members, not withstanding the nondiscrimination requirements, to "accord differential and more favorable treatment to developing countries without acceding such treatment to other contracting parties".

[96] The granting of non-reciprocal preferences by developing countries in favor of LDCs is the subject of the decision of 15 June 1999 (WT/L/304).

the products which receive preference under the GSP have often been made in an arbitrary way, undermining any apparent commitment towards developmental objectives. The products which receive preference under the GSP are not necessarily those most favored by the exporter, but rather those which are least likely to be disruptive to the importer's producers. As a result preference receiving countries have therefore suggested the binding of preferential rates or margins to increase the security of GSP benefits[97].

The generalized basis of preferences under the enabling clause means that there is no need for donor countries to seek permission to grant preferences to developing countries or even better preferences to LDCs. However, as noted, unilateral preferences are not covered by the enabling clause. Given this limitations, the researcher would like to review econometric studies made by different scholars on the effectiveness of the GSP. A paper by Ozden and Reinhardt[98] provides econometric evidence using a data set of 154 countries from 1976 to 2000 that developing countries within the GSP tend to be systematically more protectionist than non GSP countries. This considered as negative from the point of view of global welfare, because consumers either end up paying higher prices for their imports, or consuming less. The Orthodox view defended by Ozden and Reinhardt has been challenged by Rose (2002). Using a gravity model specification, Rose reaches the conclusion that membership of the WTO per se does not seem to have any positive impact on the volume of trade. In other words, his results suggest that it is the international system of reciprocal, multilateral liberalization is failing developing

[97] The enabling clause does not provide legal cover for nonreciprocal, country selective preference schemes such as those by the European Union in favor of ACP countries by the US and Canada in favor of Caribbean countries , and so on. These are covered by waivers from Article I of the GATT which are limited in time and require WTO approval for renewal.

[98] Ozden and Reinhardt (2003)

countries[99]. In contrast according to Rose's econometric results, the GSP approximately doubled the volume of trade between signing partners. Similar support for effectiveness of the GSP is found by Nielsson (2002).

In 2001 only 68.5 percent of total imports from LDCs eligible to enter Quad markets at a preferential duty rate actually did so[100]. The rest paid MFN duties. Although this might seem quite low, the utilization rate increased by 20 percent points between 1994 and 2001[101].According to UNCTAD (2004:250), the low utilization ratios are basically in the context of the " insignificant magnitude of the potential commercial benefits; the lack of technical knowledge, human resources and institutional capacity to take advantage of preferential agreements, which require in-depth knowledge of national tariff system in various preferences giving countries, and conditions attached to the realization of the potential benefits of the preferences. The effective benefits of market access preferences provided by non-tariff barriers, notably rules of origin and product standards."

3.2.2. European Union Market preferences

Europe and the countries of Africa, Caribbean and the Pacific (ACP) trade agreement and Everything But Arms (EBA) Initiatives are the main trade preferences offered by EU for developing and least developed countries. European Union member countries are the major Ethiopian export consumers. Trends of export trade volumes of Ethiopia to EU during the last nineteen years, depicted in figure 9 below, reaffirms this fact. Therefore,

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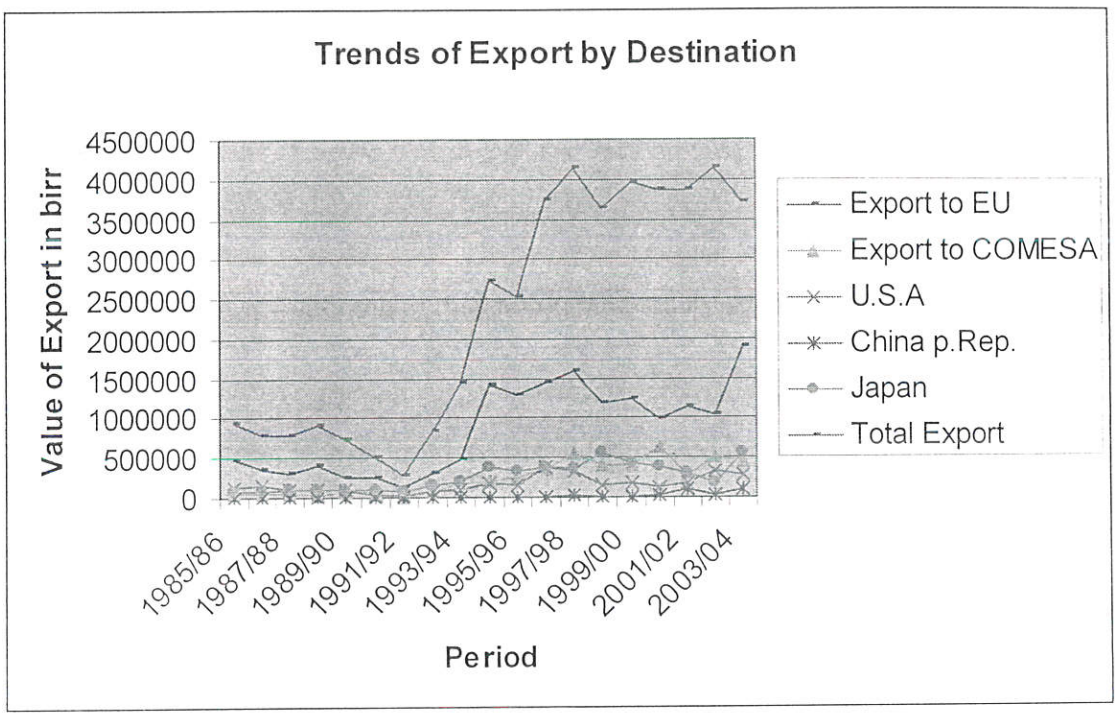
[99] In fact, it could be argued that a dummy variable to reflect WTO/GATT membership is not the most appropriate way of measuring the impact of the multilateral system: particularly in Africa in the 1980s and 90s many countries liberalized unilaterally, due to the conditional ties placed upon them under structural Adjustment Programmes. This does not mean, however, that membership of the WTO does not exert a significant influence of trade policy.

[100] UNCTAD(2004)

[101] Ibid(P:251) and for full description see annex

in this section more elaborated discussion and analysis on the granted EU markets preferences are made.

Figure 9: Trends of Ethiopian Exports by Country of Destination (from 1985/86-2003/04)



Source: Computed, from Various NBE Annual Reports.

3.2.2.1. EU-ACP Economic Partnership Agreement

Since its inception, the European Economic Community (EEC) agreed to apply a favorable economic treatment to African countries. The treaty of Rome signed in 1957, founding the EEC offered special trade and economic support measures for the offshore territories and dependent countries of the then six EEC member states (Belgium, Federal Republic of Germany, France, Italy, Luxemburg, and Netherlands). In 1958, the first

European development Fund (EDF) was set up to finance economic and social development projects, mostly in then French territories[102].

Upon their independence, in the early 1960's, some African countries negotiated with the EEC the continuation of their preferential economic relations. This gave rise to the beginning of the EU-Africa partnership, under which the European Community (then the European Union) and the group of African, later joined by Caribbean and Pacific countries agreed on a framework of economic, cultural and political cooperation [103]. Over time this partnership saw its coverage extended both in geographical terms and in the number of areas of cooperation covered. The accession of the United Kingdom to the European Community in 1972 was followed by a significant increase in the number of Member of states in the ACP group[104]. The African-Economic Cooperation partnership was launched on a contractual basis by the signing of the first Yaoundé Convention in July 1963, between the EEC and 18 Africa States, mostly francophone countries[105]. The convention contained provision on trade and financial aid. Interestingly, the trade provisions of Yaoundé were based on reciprocal and non discriminatory terms, pursuing the trade arrangements of pre-independence time. Such reciprocal arrangement were closer to those of a free trade arrangements of a preferential trade scheme[106], and as such, more similar to the Economic Partnership Agreements (EPA) currently under negotiations between the EU and ACP states. Agricultural development was given a high profile in the first Yaoundé convention. The second Conference of Yaoundé, signed in

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[102] Brenton, Paul Miriam Manchin (2003)
[103] EUROSTEP (2004)
[104] Ibid
[105] UNECA(2005)
[106] Henri-Bernard Solignac Lecomte (2003) and also downloadable at :http://europa.eu.int/comm/development/body/cotonou/overview-en.htm#Heading1

July 1969, provided an increase in European Development Fund resources for development projects. It also prolonged the reciprocal non-discriminatory trade arrangements. Kenya, Tanzania and Uganda chose to join the second Yaoundé Convention. Major reforms to the European Economic Community-African partnership were introduced after the expiry of the Yaoundé Convention, when the first Lome Convention was signed in February 1975. At this time, the European Economic Community (EEC) had experienced its first major enlargement, with among others the accession of the United Kingdom. In this new context, countries that had until then privileged trade relations with Great Britain in the Common wealth were confronted with a shift in paradigm, as their traditional partner (the UK) overhauled radically its trade framework. Hence, the UK's accession to the EEC was a therefore extended to 46 members, including for the first time, Caribbean and Pacific nations[107].

The Lome Convention was hailed for its innovation and as an exemplary form of North-South partnership. The agreement include all SSA countries, with the exception of South Africa[108].With hindsight, however, most commentators now agree that the successive Lome Conventions failed to reach their development objectives and need reforming. It was characterized by its contractual nature, its partnership principle and a combination of aid, trade and political aspects. It was renewed four times, until 2000. The Convention proposed a non-reciprocal discriminatory trade agreement between the EEC and the ACP group. This arrangement was a radical change from the Yaoundé Convention, which stipulated reciprocal and non-discriminatory trade. Concretely, while the EU was granting a very favorable market access to ACP countries, those were not committed to

[107] Ibid
[108] UNECA(2004)

grant equivalent concessions to European exporters. The Lome Convention also introduced an innovative mechanism aimed at compensating ACP members in case of a fall on their commodity export revenues. STABEX was therefore introduced by the first Lome Convention (1975), with a view to offering compensations for ACP members that experienced a brutal decline in their revenues from trade in agricultural goods. The second Lome Conference (1980) introduced SYSMIN, an equivalent mechanism for revenues of trade in mineral commodities. Both STABEX and SYSMIN were funded through the EDF, making payment advances to ACP states that were supposed to be refunded at a later stage.

However, it has not met its development objective. Africa has lagged behind the rest of the developing world, both in terms of its integration in world trade,[109] but also and more importantly in terms of poverty reduction and socio-economic development. Thus, ACP countries exports saw their share of the EU market diminish from eight percent in 1975 to 2.8 percent in 2000[110]. It would therefore be too simple to conclude that the EU-ACP agreement has not been effective for ACP countries. Clearly, the aggregate results are disappointing, with an apparent inability to maintain even existing market shares. Moreover, a change in the attitude of the EU towards the WTO compatibility of its trade regime with the ACP countries also occurred[111].

As a result EU proposed the new ACP-EU agreement and this agreement was signed in Cotonou, Benin in June 2000[112]. This agreement will run for a duration of twenty years,

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[109] ACP countries' share of EU market declined from 6.7% in 1976 to 3% in 1998, and still about 60% of total exports are concentrated in only 10 products. Source: http://europa.eu.int/comm/development/body/cotonou/overview_en.htm#Heading1

[110] UNECA (2005) on its paper titled "Economic Welfare Impacts of the EU-Africa Economic Partnership Agreements" provided the evidence being acknowledging the EU Commission.

[111] Ibid

[112] Ibid

with possible revisions every five years and renegotiations of the financial protocol at the same intervals[113]. The new agreement rests on five interdependent pillars: a comprehensive political dimension consisting in an enhanced dialogue, and a special focus on conflict prevention and resolution, as well as on governance issues and the respect of human rights and the rule of law, a set of participatory approaches, including greater emphasis on the role of civil society, a focus on poverty reduction, and a central role for the private sector and regional integration in development strategies, a new framework for trade and economic cooperation that would put regional integration at the fore-front, and extended cooperation to non-trade areas, a reform of fiscal cooperation, through the simplification and enhanced flexibility of the financial instruments of the partnership as well as the introduction of a performance criteria in the allocation of aid[114]. As far as trade is concerned, Cotonou agreement does not really detail the provisions for future[115]. It does, however, offer the pursuit of Lome non-reciprocal trade arrangements until 2008 at the latest, and offer a framework of negotiations for future trade arrangement after that date[116]. Under the Cotonou agreement, however, ACP countries may choose not to take part in EPAs. Hence ACP LDCs that choose not be part of EPAs will still to a large extent benefit from duty access to the EU's markets under the EBA Initiative.

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[113] EUROSTEP(2004)
[114] Ibid
[115] UNECA(2005)
[116] This arrangement was validated by another waiver, granted by WTO members during the Doha WTO Ministerial conference in September 2001. After this deadline, the agreement stipulates clearly that a WTO compatible trade arrangement will have to be put in place.

Turning to assessing effective utilization of the preference, according to a study conducted by UNECA Ethiopia utilized only 24% of the preference[117]. The study also pointed out that the effective usage of the schemes by African countries in general depends not so much on deficiencies in their operational characteristics, but rather on the structure of exports of the country in question. As it is clearly shown in section 3.1.2 above, Ethiopian exports concentrate on few commodities in its structure and characterized by low or stagnant in its growth. Thus the low level utilization rate of the preference by Ethiopia could be a manifestation of these reasons.

3.2.2.2. Everything But Arms (EBA) Initiative

The EBA proposal was enacted by the council Regulation No. 416/2001 of 28 February 2001, amending European Commission (EC) Regulation No. 2820/98 applying a multi-annual Scheme of generalized tariff preferences for the period 1 July 1999 to 31 December 2001, so as to extend duty free access without any quantitative restrictions to 919 agricultural products originating in the least developed countries[118]. More than 50 percent of the liberalized tariff lines covered meat and dairy products, beverage and milled products[119]. EBA entered into force on 5 March 2001.

It should be noted that while the preferences for developing country under the GSP scheme are subject to periodic renewal the special arrangements provided for in the EBA

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[117] UNECA (2004) study on "Trade Preference and Africa" employed 'Analysis of Products Granted Large Preference Margins' approach to evaluate the utilization rates of each country. This approach evaluates the effectiveness of a give scheme on a product-by-product basis: export products where the margin of preference is large would be expected to respond better to the incentive provided by the preference-giving country. The computed figures are annexed. Therefore, for further references, see annex 2.The study employed utilization rate approach to determine the utilization of the preference (the value of imports receiving preferences divided by the value of imports eligible for the preference).

[118] Page, S. and A. Hewitt (2002)

[119] bid

initiative (modifying the GSP) with regard to market access for LDCS would be maintained for an unlimited period of time[120].

All the products included in the initiative are agricultural products in contrast with the original GSP which is in line with the Prebisch thesis focused on manufactured products as discussed under section 3.2.1. Products such as fruits and vegetables, meat, beverages and dairy products are now granted duty free and quota free access to the EU market. Only three products have not been liberalized immediately: bananas, rice and sugar. Their phase- in periods for full market access is as follows:[121] duties on bananas be gradually eliminated by 20 percent annual reduction, starting on 1 January 2002. All duties will be eliminated from 1 January 2006; full liberalization of rice is phased in between 1 September 2006 and 1 September 2009 by gradually reducing the full EU tariff to zero. Duties will be reduced by 20 percent on 1 September 2008. During the transition period LDC rice can be exported duty free to the EU within the limits of a tariff quota. The initial quantities of this quota shall be based on best LDC export levels to the EU in the recent past, plus a growth factor of 15 percent. The quota will grow every year from 2517 tones in 2001/2002 to 6696 tones in 2008/2009.Similar arrangements are provided for sugar. Full liberalization will be phased in 1 July 2006 and a July 2009. During the transition period, LDCs raw sugar can be exported duty free to the EU within the limits of a tariff quota which will be increased from 74185 tones (white sugar equivalent) in 2001/2002 to 197355 tones in 2008/2009.

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[120] One common criticism of GSP schemes and other non-binding unilateral preferential schemes for developing countries was the uncertainty of such trade regimes stemming from their annual renewal. Donor countries can exclude countries and products or alter the procedures at any time when such preferential schemes are renewed. Not being subject to periodic renewal, the EBA initiative makes a step further in reducing the uncertainty of preferential market access for LDCs. However being adopted within the GSP framework the EBA unlike the EU-ACP arrangements can be modified unilaterally by the EU.

[121] The information provided is based on data available from the EC, at: http://www.europa.en.int/comm.

The adoption of EBA had to meet certain conditions imposed by other international trade arrangements where the EU was signatory; the WTO agreements and the ACP preferential trade arrangements. The EBA was adopted as an amendment to the existing GSP scheme in order to benefit from the compatibility with the WTO rules of the current GSP scheme. The basis for EBA under WTO is paragraph 2(d) of the Enabling Clause of 1979, which allows for special treatment to be granted for LDCs in the context of any general or specific measures in favor of developing countries. The EBA had to be not only WTO compatible but also to grant non discriminatory market access to all ACP countries. However, the EBA initiative would have granted more preferential market access to all ACP LDCs than the one enjoyed by ACP non LDCs countries.

Apart from the extension of duty and quota free market access to all products (with the exceptions of arms) origination in LDCs, the EBA brings only few changes in the general rules administering the existing GSP scheme. Of these, one of the more important changes is that unlike the EU GSP scheme that is subject to renewal and revision, EBA has no time limitation. On the other hand, the EBA also introduces new provisions allowing the EU to introduce safeguard measures when massive increases in imports of products originating on the LDCs arise in relation to their usual levels of production and export capacity. Specific safeguard measures apply especially with regard to sensitive products (bananas, sugar and rice); if imports of these products cause serious disruptions to the EU mechanisms regulating these products (the CAP and ACP- EU protocol in particular)[122].

These new safeguard measures are in addition to those laid down on preferential tariff treatment under the GSP, whereby preferential tariff treatment may be temporarily

[122] ibid

withdrawn (in whole or in part) in the case of certain activities including Slavery, forced labor, export of goods made by prison labor, manifest shortcomings in customs controls on money laundering and fraud or failure to provide the cooperation required for the verification of certificates of origin. Other circumstances qualifying for such a withdrawal are manifest infringements of the objectives of international conventions concerning the conservation and management of fishery resources.

Furthermore, MFN duties on a product may be reintroduced where that product originating from a developing county is imported in terms which cause or threaten to cause serious difficulties to a community producer of like or directly competing products. This is basically parallels safeguards under GATT Article XIX. In examining the possible existence of such serious difficulties the commission takes, among other things, the following factors into account: reduction in market share of community producers, reduction in their production, increase in their stocks, choose of their production capacity, bankruptcies, low profitability, low rate of capacity utilization, employment, trade and prices.[123]EBA initiative modifies the GSP scheme by adding to the reasons for the possible temporary withdrawal of preferences a 'measure increases in imports into the community of products originating in LDCs in relation to their usual levels of production and export capacity.[124] This addition shall allow the commission to 'react swiftly when the communities financial interests are at stake'[125]. The post –EBA GSP scheme also contains an extra paragraph in article 28 allowing for the supervision of the preferences

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[123] It is stated that the commission will do so 'where the information is available', which commentators criticizes in its subjectivity.

[124]In World Institute for Development Economics Research (WIDER) Discussion No.2003/47 titled 'The EU's EBA Initiatives and LDCs' states that this information is contained in Article 1:4 of European Commission council Regulation No. 416/2001 of 28 February 2001.

[125]WIDER Discussion Paper No.2003/47ackoweldges that the source of the information is contained in Paragraph 13 in the preamble of council Regulation No.416/2001 of February 2001.

provided by this regulation for rice, sugar and bananas, 'if imports of these products cause serious disturbance to the community markets and their regulatory mechanisms'[126]. The commission announced that whenever LDC imports of rice, sugar, or bananas exceed, or are likely to exceed the previous years level by more than 25 percent, than it will automatically examine whether the conditions for applying GSP safeguard measures are met[127]. It remains to be seen whether the EBA modifications to the GSP safeguard scheme will in practice work to frustrate market access for LDCs or to provide a genuine escape mechanism where severe market disturbances result from the newly granted LDC preferences.

The major concerns were voiced during the adoption of EBA by the EU. The first related to the significant trade diversion effects that the EBA could potentially have on other developing countries, ACP countries in particular[128].The second warned against the impact of EBA on the European Union's Common Agricultural Policy (CAP) argued that, because of likely exclusions to avoid 'damage' to EU agriculture, the EBA would in fact be 'everything But Farms'[129]. The CAP has provided an array of policy measure in support of domestic agricultural production and EU farmer's incomes[130]. Domestically, the CAP introduced various direct and indirect support measures, while on the foreign trade side it is now based on complex and substantial tariffs and tariff quotas to reduce

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[126]Ibid contained in Article 1:5 of council Regulation No.416/2001 of 28 February 2001

[127] Detail can also be found at: http:www.sugartraders.co.uk/archive.htm and http://www.eurinco.co.uk/trade/eba-rev2.htmthe

[128] Page and Hewitt (2002)

[129] Rasmussen (2001)

[130] The CAP comprises a series of general and sectoral arrangements for almost all agricultural products: arable crops, potato starch, cereals, olive oil, grain legumes, flax, hemp, silk worms, bananas, dried grapes, tobacco, seeds, hopes, rice meat and meat products, wine etc.

import competition attracted by high domestic prices, while export subsidies are used to dispose of domestic production surpluses[131].

I n the past several budgetary crises arose for certain products (Grains, milk and sugar) as the CAP budget was too small to ensure attractive running[132]. Budgetary problems also became an issue during the adoption of EBA. It was argued by many domestic producer groups that by eliminating tariffs and non tariff quotas on products that are subject to CAP provisions EBA would increase imports to such an extent that it would make CAP support measures ineffective[133].

Turning to assessing the impact of EBA Initiative, research by the OECD notes that most African countries have hardly ever used the scheme, with a utilization rate of less than 3 percent[134]. The possible reasons indicated for this are because the export products of these countries are already duty free, or because they are entering the European market under Cotonou scheme[135]. In the context of Ethiopia, either reason could not be applicable (her utilization of Lome and / or Cotonou trade preference is so low as thoroughly discussed under section 3.2.2.1 above). Therefore, the reason could be the supply constraints.

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[131] Quantitative restrictions and variable import duties were eliminated under the Uruguay Round Agreement on Agriculture, although some products reclassification closely mirrors the effects of variable levies.

[132] Weyebrock (1998).

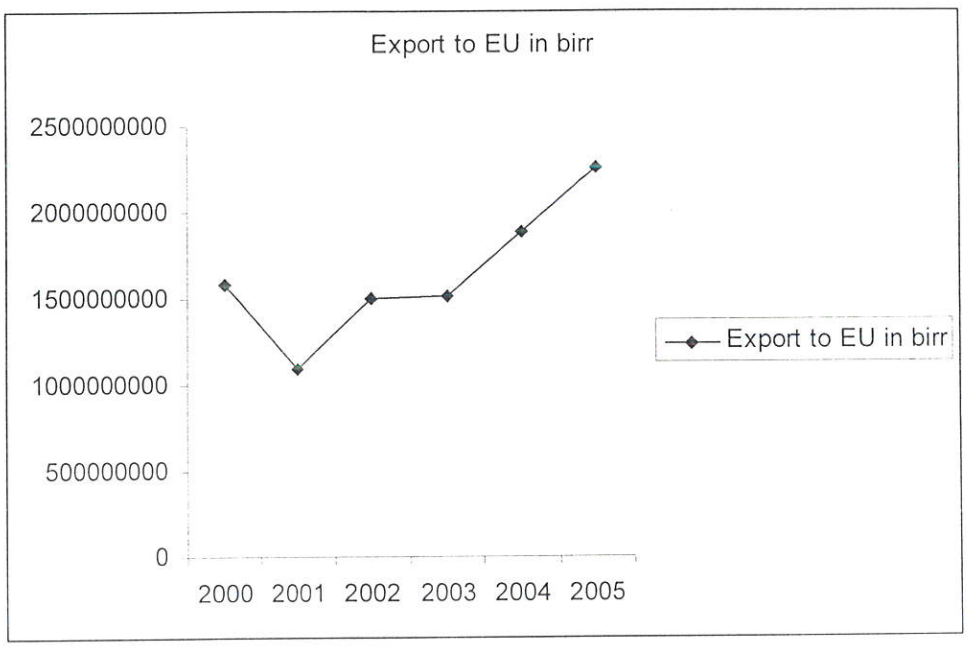
[133] Agra Europe (2001)

[134] OECD (2004:37) explains that most African countries are under utilizing the offered trade preferences.

[135] EBA is in competition with Cotonou for around 86% of EBA-eligible imports. In 60% of EBA-eligible import operations (products and countries), the LDC's preferential margin in relation to Cotonou is low OECD (2004:47).Others argue that the requirements of compliance with rules of origin appear to be decisive, especially for processed products. The rules of origin for the EBA are certainly more restrictive than in the Cotonou agreement. Under the Cotonou agreement with some exceptions, full cumulation within the ACP countries is allowed for. Thus products that undergo further processing on ACP countries, although the original goods may not have originated in the ACP region, are still eligible for duty-free access. This is not the case with the EBA agreement –since the EBA is the extension of the GSP, the concept of diagonal cumulation applies, meaning that although products can move within the EBA countries for further processing, sourcing outside the EBA, including with other ACP countries, is not an option for products to enter the EU duty free.

However, figure 10 below depicts that Ethiopian export to EU member countries since 2001 showed an increasing trend. Of course, this does not indicate that Ethiopian export to EU member countries share as a proportion to total export is increasing[136]. Therefore, what the investigator can say is her utilization of the preference is not satisfactory.

Figure 10: Ethiopian Exports to EU Member Countries from 2000-2005 in Birr



Source: Computed, from Ethiopian Custom Authority (ECA)

3.2.3. The African Growth and Opportunity Act (AGOA)

African Growth and Opportunity Act (AGOA) was adopted by the United States Congress in May 2000 to offer 'tangible' incentives for African countries to continue their efforts to open their economies and build free markets[137]. Thanks to this Act, eligible African countries would enjoy better market access to the United States with a

[136] As Ethiopia's export share by destination to EU member countries declined from 39.8% in 2000 to 31.7% in 2005. This is as per researcher's computation from ECA data.
[137] It can be found at AGOA's webpage: www.agoa.gov.

larger number of duty free lines. However, significant restrictions still exists in AGOA[138]. There has been uncertainty given that each country's eligibility is reviewed annually, with the risk for an eligible country of losing instantly the advantages granted.

Moreover, to access AGOA, African countries have to face restrictive conditions. First, the rules of origin are strict, especially in textiles, leading countries like South Africa to opt out of the preferential access offered by AGOA to export apparel to the United States. Furthermore, complementary conditions for African countries are associated with the agreement such as opening their markets to US trade and investment, strengthening customs requirement and implementing market based reforms[139]. According to some calculations, the absence of these restrictions would have magnified the impact of AGOA nearly five fold, leading to an increase in non-oil exports of US $ 540 million, instead of the US $ 100 – 140 million expected in the presence of these restrictions[140].

The products coverage is not comprehensive: some sensitive products for African exporters are still excluded from the agreement. According to UNECA (2004), eight percent of the tariff lines are not covered by AGOA[141]. These are mainly textiles and footwear that still face exceptionally high tariffs[142].

However, countries such as Mozambique, Swaziland and Lesotho abled to export 90, 83 and 95 percent of their exports under AGOA preference to US[143]. Ethiopia's utilization

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[138] Aaditya and Subramanian (2003)

[139] In fact, the way in which benefits from AGOA are tied to a better treatment of US investments and exports from the beneficiary country is potentially in conflict with WTO rules of MFN treatment.

[140] UNECA (2005) in its publication titled 'Unrestricted Market Access for Sub-Saharan Africa' stated that the restrictive conditions of AGOA undermine its benefits to African countries in general.

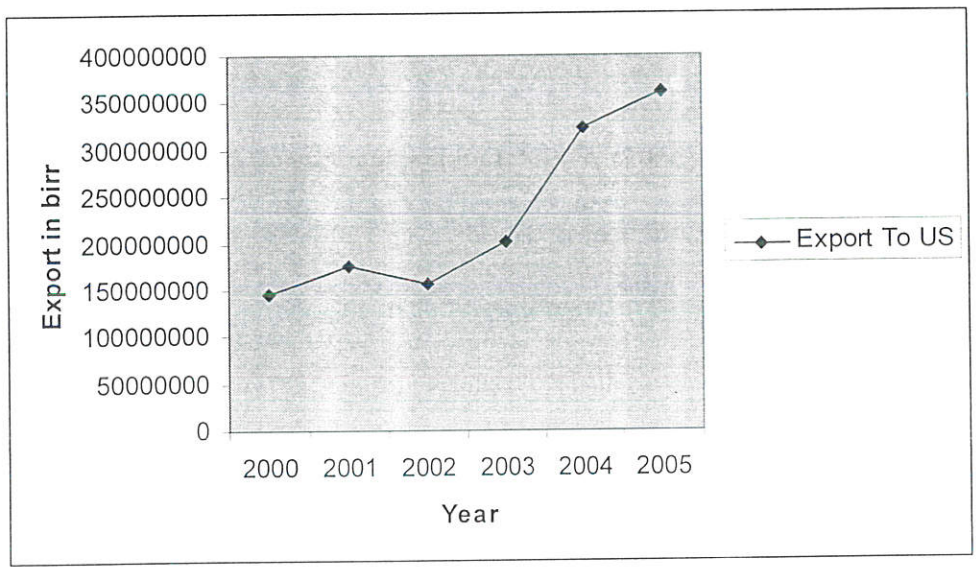
[141] UNECA (2004) stressed that AGOA is not an all-comprehensive agreement-of a total of 12750 tariff lines, 1067 are not covered by the agreement, representing 8 percent of the total.

[142] Ibid

[143] According to UNECA (2004) calculation of utilization of AGOA preference, these countries major beneficiary of the preference. The study employed utility rate approach (the value of import receiving preference divided by total imports).

rate of the preference as calculated by UNECA (2004), however, is 9 percent. Looking at export trend of Ethiopia to US, it shows an increasing trend (as depicted in figure 11). Export to US as proportion to total export during the same period, however, indicates some what a fluctuating share[144]. Therefore, like utilization of EBA initiative, AGOA's preference utilization of Ethiopia is also not satisfactory.

Figure 11: Ethiopian Export to US from 2000-2005



Source: Computed, from Ethiopian Custom Authority (ECA)

3.2.4. Common Market for Eastern and Southern Africa (COMESA)

The Common Market for Eastern and Southern Africa (COMESA)[145] was founded in 1993 as a successor to the Preferential Trade Area (PTA) for Eastern and Southern Africa, which was established in 1981[146]. COMESA formally succeeded the PTA on 8 December 1994. The establishment of COMESA was a fulfillment of the requirements of

[144] As per researcher's computation based on ECA data, share of export to US as a proportion to total export shows 3.66, 4.55, 3.84, 4.04, 6.06, and 5.07 percent in 2000, 2001, 2002, 2003, 2004 and 2005, respectively.
[145] COMESA member countries and its historical establishment can be downloaded at: http://www.africa.union.org/recs/comesaprofile.pdf
[146] The information can also be downloaded at: http://www.comesa.int

the PTA Treaty, which provided for transformation of the PTA into a common market ten years after the entry into force of the PTA Treaty.

It was established with the aim of strengthening the process of regional economic integration that had been initiated under the PTA, in order to help member states achieve sustainable economic growth. Among other things, COMESA's main priority is the establishment of a free trade area by October 2000. Currently, Ethiopia is a member of COMESA; but has not yet fully integrated into the common market system[147]. She is adopting a gradual and step-by-step trade liberalization strategy for eventual integration. In the COMESA arrangement, the first step is the establishment of the free trade area (FTA), which eliminates tariff and non-tariff measures on trade in goods produced within member countries. The FTA is expected to expand to a custom union (CU) regime. In this arrangement, a common tariff and non tariff measures on imported goods from non-members is introduced in all member countries, further consolidating the integration. Overtime, the custom union develops to a common market where trade in goods would be followed by trade in services and free movement of factors of production, both labor and capital, as well as entrepreneurial skill.

The establishment of the FTA requires, in addition, the evolution of uniform national customs legislation and procedures and full elimination of import duties and non-tariff barriers on trade among all of the member countries. Problems in implementation are certain, of course, not least due to ill-equipped customs and regulatory control. But local factors of production will be affected throughout the region, with elements of competition entering more and more sectors in the economies of COMESA's member states. Concern over dominance of the stronger states within COMESA and the loss of jobs and capital

[147] The information source is Ethiopian Ministry of Trade and Industry (MoTI)

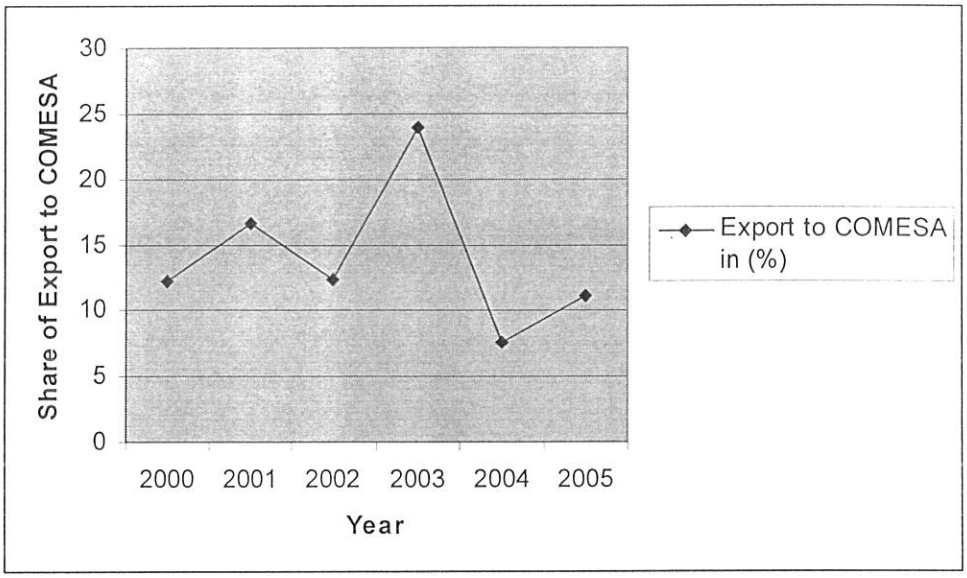
by less competitive economies are justified. In addition, no FTA has faced the physical and institutional obstacles to trade that COMESA will, from lack of roads and deports to poor communication systems to political volatility within regions and among members of the free trade area[148].

Concerning Ethiopia's trade relationship with COMESA member countries, as depicted in figure 12 and 13 below, it is not satisfactory. In fact, as mentioned above, she has not yet fully integrated into the common market system. However, countries like Egypt have unilaterally offered her free trade area on the same playing with those COMESA member countries which are fully integrated into the common market[149]. Djibouti, Kenya, Sudan, Egypt, Uganda, Zambia, Rwanda and Tanzania are major importers of Ethiopia's commodities among COMESA member countries. The unsatisfactory export share of COMESA member countries (as compared to their topography which may reduce transportation costs and so on) may be due to Ethiopia's lagging behind time to fully integrate into the common market.

[148] The concepts and suggestion s are well briefed on a paper titled 'Opportunities for Ugandan Exports in the Context of WTO Trade Liberalization : Analysis and Recommendation' by Christopher L. Shaw, Daniel Plunkett , Germina Ssemogerere,Yusuf Abdella, and Polycarp Musing Uzi (2000) prepared for the Uganda National Conference on Trade Policy.

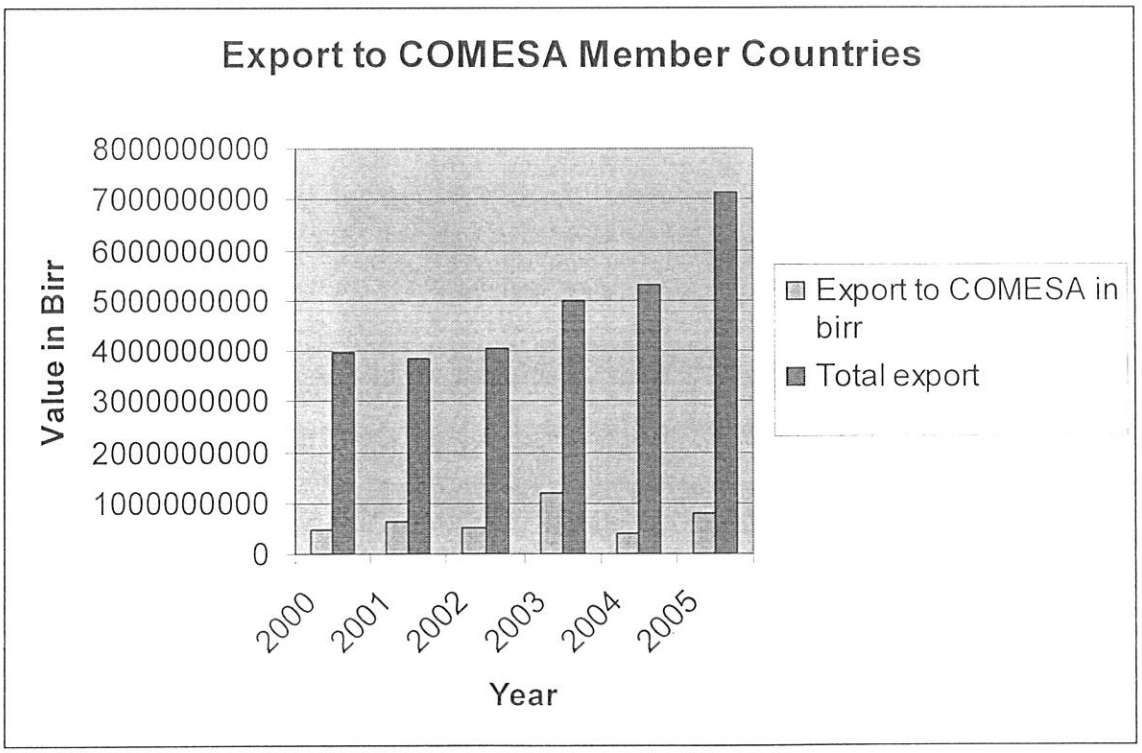
[149] The source of the information is MoTI.

Figure 12: Ethiopia's Export to COMESA Member Countries from 2000-2005(in %)



Source: Computed, from ECA NBE Reports

Figure13: Ethiopia's Export to COMESA Member Countries from 2000-2005 (In Values)



Source: Computed, from ECA and NBE Report

3.3. Possible Policy Reform Resulting from WTO Accession

Accession to WTO has an important impact on the acceding country as it implies the adoption of WTO disciplines and these poses a number of challenges for the country. In fact, some critical issues and concerns of Ethiopia has been raised and reviewed under practical and empirical review of literatures in chapter two. But in this section, specific policy changes that possibly arise as a result of Ethiopia's accession to WTO are addressed. Therefore, the researcher would like to precisely review some of the major impacts of accession to WTO on Ethiopia in relation to economic policies.

3.3.1. Balance of Payments Management

The effect of the WTO disciplines on macroeconomic policy in the presence of BOPs disequilibrium[150] is one area to be seriously considered. The importance of the broader linkages of trade policy stem from the economic relationship between the current account in BOPs and domestic aggregate variables for savings and investment[151]. This relationship, which is known under the heading of "fundamental identity", links domestic investment expenditure (relative to savings) to net imports (or net exports). An excess of domestic spending over national savings can only happen if the corresponding amount is withdrawn from the domestic economy in the form of net exports.

These linkages have been understood by the original GATT negotiators. The GATT Articles xiii and xviii make special provisions for countries with BOPs difficulties, and allow these countries to impose restrictions to ease domestic adjustment and to facilitate

[150] Balance of Payments disequilibria may happen when there is imbalance in a statistical record of all the economic transactions between residents of the reporting country and residents of the rest of the world during a given time period. For more explanations on the concepts, definitions and components of BOPs, one can refer any standard international economics books.

[151] The relationship can be represented as: (S-I) + (T-G) = (EX + TR –IM) where S, I,T, G,EX,TR,and IM represents domestic saving, domestic investment, domestic net taxes, government expenditure, export ,net unilateral transfers and imports, respectively.

the financing of current account deficits. One of the important provisions of these articles is the temporary nature of the restrictions. The restrictions must not be imposed "permanently" which means that the long term financing of current account deficits can only be achieved through domestic adjustment which in turn call for appropriate changes in macroeconomic and structural policies.

Another provision specifies that the restrictions can be taken in the form a uniform import surcharge. Thus the restrictions must not be selective and subject to different rates of surcharge. In other words, the restrictions must provide uniform protection from imports[152]. The critical effect of these provisions is to help introduce a stronger discipline into domestic policy making both on the macroeconomic and structural level. Another reason is to avoid frictions in international trade relations. Members conducting inflationary policies which lead to current account deficits are, for example, most likely to run into difficulties with their trading partners if they seek aggressively to depreciate their currencies or restrict imports. While these policies may be seen by the countries that apply them as the first best policy, this is not the case when one takes into account the likely reactions of trade partners.

Quite apart from the fact that tariffs are never the first best policy to correct balance of payments disequilibrium; both measures can be as the "beggar-thy-neighbor" policies. For this reason alone, the policies will be often resisted by the countries that are directly affected by them[153].

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[152] Strictly speaking, however, the uniform rates of import surcharge do not necessarily provide uniform import protection. In theory, this will only happen if production functions are identical in each industry. Otherwise, the governments would have to apply uniform rates of effective tariffs or some other, more sophisticated measures of import restrictions.

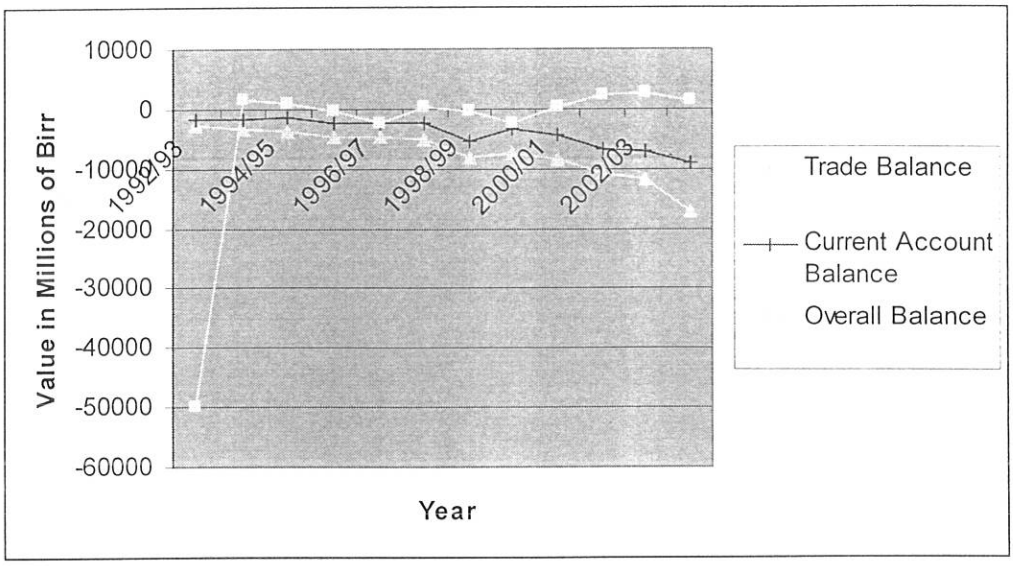
[153] WTO-Development and Economic Research Division (2002) in its paper titled 'Effects of WTO Accession on Policy Making' underscored that those WTO member countries directly affected by these provisions usually resists.

Ethiopia, as well known, has been experiencing persistent BOPs deficits since long time ago. This prolonged balance of payment deficit (as depicted in figure 14 below) requires appropriate changes in macroeconomic and structural policies[154]. The need of domestic adjustment is, therefore, imperative. This lies on the fact that she failed to improve her current account through devaluation and other internal macroeconomic policies so far she adapted. Primary commodity exporter and price inelastic good importer countries usually face current account deficit. Therefore, in this respect, it becomes imperative for Ethiopia to exert extra effort to diversify her export commodities and at the same time work hard to shift her economic base to industry. The provisions of WTO Agreement for BOPs disequilibria adjustment as clearly explained above, don't give domestic policy space for structural transformation rather to introduce stronger discipline on domestic policy making.

Therefore, BOPs disequilibria adjustment is one important area to be given due attention during concessions for accession.

[154] In case of Ethiopia, the persistent BOPs deficit has been attempted to correct, among other things, by devaluing the currency from birr 2.07 per dollar in 1990/91 to birr 5 per dollar in 1991/92, and then to managed type of exchange rate and hence currently the exchange rate is about birr 8.67 per dollar. However, the actions were not effective as the deficit of current account has been increasing.

Figure 14: Trends of BOPs of Ethiopia from 1992/93-2003/04



Source: Extracted, from Various Annual Reports of NBE

3.3.2. Impact on Regional Agreements

Accession to WTO may sometimes complicate the relations of countries with some of the existing trading partners. Problems have indeed arisen as a result of conflicts between obligations imposed by regional agreements on the one hand and the WTO on the other[155]. Regional trade negotiations may in turn complicate the countries negotiations for accession to WTO which specifies in Article xxiv of GATT the precise conditions under which preferential trade arrangements is acceptable in the WTO. Currently, Ethiopia is active member of COMESA, EU-ACP economic partnership, etc. Therefore, in this respect, she is required to make sure that preferential trade agreements made so far with her trading partners are inline with WTO rules and disciplines.

[155] WTO Working Paper No.DERD-2002 (2002) PP. 35-40

3.3.3. Adjustment Costs and Policy Responses

The most conteroversional cost of accession is adjustment costs resulting from changes in relative prices and competitive conditions following the accession to the WTO. Liberalization of the country's trade regime will change the domestic relative prices of goods and services, which, in turn will lead to increased competitive pressures on industries that had been until now protected by tariff or non tariff barriers. This, in turn, will create incentives for resources- capital and labor- to move into sectors which are more profitable and efficient. This process of resource allocation is not without costs as labor is retrenched and must move and be retrained (or the opportunity cost of unemployed labor must be imputed into the calculations of adjustment cost). Capital is more mobile than labor but investors will also compute their adjustment costs and take into account, inter alia, the sunk costs of capital.

These adjustment costs are principally private costs but they are also likely to have profound implications for economic policy. It would be very rare indeed that the private costs of adjustment would be fully financed by private individuals or firms. More common is for governments to share in financing the costs in order to facilitate the adjustments[156]. The relevant measures include measures towards labor retraining, unemployment support, etc, all of which force governments to organize their business differently than before.

The response of government to changes in domestic market conditions critically depend in the impact of these changes on production, employment, price level and welfare. While in the long run the scope for positive gains from trade is well understood, countries may

[156] Ibid pp. 14-19

face adjustment costs in the short run[157]. A complicating factor for the assessment of government responses is the negative perception of some governments and observers about the value of WTO Agreements. The Agreement may have been subject to two kinds of criticism. The criticism concerns the effects of welfare and the distribution of benefits from the TRIPs and TRIMs among countries. The argument is that these agreements primarily serve the interests of developed countries and do not bring the corresponding benefits for developing benefits for developing countries. On TRIPs for example Panagarya constructed a theoretical case to suggest that the Agreement is a welfare reducing instrument for developing countries as well as for the world as a whole[158]. Similarly two WB economists Finger and Schuler argued that in establishing the content of the obligations imposed by the WTO Agreements on intellectual property rights (and customs valuation and SPS) the developed countries have essentially imposed their standards. In their view, the TRIP Agreement does not for this reason alone protect indigenous technology nor does it encourage innovation[159]. The criticism of the TRIMs Agreement is based on the perception that trade related investment measures are useful as the second best policy instrument to stem restrictive business practices of multinational enterprises or to offset distortions due to tariffs. The view is rejected by the critics of TRIMs who argue that these measures introduce new distortions which tend to increase the country's import costs, worsen their Bops positions, and fail to generate export earnings and to transfer technologies to developing countries. In brief the critics dismiss TRIMs both on theoretical grounds pointing to the inefficiencies of these instruments and

[157] Ibid
[158] Panagarya (1999) p. 25
[159] Finger and Schuler (1998) p.68

on empirical grounds demonstrating their general failure in countries in which were used[160].

These views sharply contrast with the general assessments of gains to countries from their accession to the WTO. In econometric study based on a nine commodity by twelve regions version of the GTAP model Yang estimated the welfare effects of the WTO accession by China, Taiwan and the countries of the former Soviet Union both on the acceding countries themselves as well as on different regions of the world. He found that the accession is likely to bring substantial welfare benefits for the acceding country. Welfare gains are found to be much more dubious for other regions and critically depend on the level of agricultural subsidies in the OECD countries. However, if all dynamic factors of globalization were to be included in the analysis which could not be captured by the model itself the overall welfare gains become even not widespread and evident[161]. Therefore, while on process to accession, Ethiopia is required to investigate the adjustment cost expected to incur and able to design appropriate policy.

3.3.4. Implementation Cost and Budgetary Policies

Acceding countries typically have to carry out fairly significant changes in their policies and institutions to ensure full compatibility of domestic legislation with that of the WTO and the existence of all institutions required for the implementation of the countries' WTO commitments. This raises serious questions for governments of acceding countries. What is the implementation costs resulting from accession? While recognizing that the costs may differ among countries, can we identify the main elements of these costs? How high are the costs? Can they be fully and easily absorbed by the acceding country? If the

[160] Bora and et al (2000)
[161] Yang (1999)

implementation costs are high, should the country pursue its accession objective by taking all or at least the measures before the negotiations or can the measures be introduced during the time of negotiations? Would it be better for the country concerned to plan its accession in such a way that the adjustment costs are minimized? These are important questions for policy makers and negotiators. In this paper, I shall not attempt to answer all of these questions which would be beyond the scope of the paper. However, I shall say few on some of these issues.

Implementation costs are a part of adjustment costs of WTO accession which in turn can be divided into two broad categories public and private costs. The former in turn typically includes different types of costs resulting from the implementation of the WTO Agreements. The first important group includes costs that arise out of the harmonization of the country's policy instrument with those of the WTO. Under GATT and WTO Article XI Quotas must be replaced by tariff as the sole instrument of trade protection. The economic rationale for the rule is to replace administrative instruments of protection by price based policy tools. This switch of policy regimes can be complicated, disruptive as well as costly.

The second important group of adjustment of costs includes the costs of institutional changes. The implementation of WTO Agreements is not a simple matter of adopting new laws. For Ethiopia it typically involves the setting of new administrative capacities and substantial changes in technologies and new investments. The Agreement on SPS and on technical barriers to trade require the existence of specific testing equipment ,legal provisions for SPS and technical barriers to trade norms, sufficient number of staff with adequate and appropriate skills and so on.

The implementation of Article vii of GATT requires the establishment of administrative capacity, the training of custom officers, the learning of commercial practices, the development of risk analysis, and audit systems. The implementation of the TRIPs Agreement is equally investment intensive and it also requires drafting new legislations augmenting the administration to review applications build up of computerized information systems, extensive training, the setting up of enforcing agencies etc. These costs may be quite high. In their study of the WB and UNCTAD projects in support of the implementation of technical sanitary and Phytosanitary standards and of the intellectual property law Finger and Schuller concluded:

"Implementing such reforms is investment decision in that implementation will require purchase of equipment, training of people, establishment of systems of checks and balances etc. This will cost money and the amounts of money are substantial. ...those figures of project costs for just three of the six Uruguay Agreements that involve restructuring of domestic regulations come to130 million dollar. One hundred thirty million dollars is more than the annual development budget for seven of the twelve LDCs for which we could find a figure for that part of the budget.[162]"

Therefore, the budgetary implications of the WTO Agreements can not be underestimated.

In fact, in this area she needs to thoroughly examine the implementation costs of accession packages and concessions[163].

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[162] Finger and Schuler (1998) p.25

[163] Experiences of other countries' implementation costs of three WTO agreements (that is, custom valuation, SPS and Intellectual Property Rights) are annexed for reference.

3.3.5. Customs Revenue

WTO accession may affect customs revenues which are often of an important source of government revenues on countries with relatively low levels of income per capita. This concern is linked to the importance of tariffs as a source of government revenue in many developing countries. But the effect of WTO accession may differ from country to country, and the final outcome is indeterminate a priori[164]. To the extent that accession leads to a reduction of tariff rates in the acceding countries this will tend to reduce tariff revenues. At the same time, however, WTO accession may broaden the tax base.

Accession will lead to the elimination of quotas, which are on the WTO list of prohibited trade policy instruments. Quotas are typically replaced by tariffs on the acceding countries and this switch should add to the government's capacity to generate revenue. The WTO Agreement on customs valuation should also broaden the tax base and thus contributes positively to tariff revenue as customs authorities are more effectively able to register import transactions and collect tariffs. Last but not least, lower tariffs will stimulate in the long run economic activity and thus the volume of imports. This will have a positive impact on tariff revenue as well as on the base of other taxes. However, both simple average tariff and effective rate of protection as discussed under section 3.1.3.1. above shows that Ethiopia may be required to reduce her current tariff rates. This action adversely affects her economy.

[164] Different scholars arrived at different outcomes due partly to differences in level of development of countries and partly to tariff base improvement. However, in Ethiopia at least in the short run due custom valuation and related as well as her level of development, the outcome most likely be adverse.

Table 4: Trend of GDP and Custom Revenue in Millions of Ethiopian birr

Year	2000	2001	2002	2003	2004
GDP	53189	54210	51760	57077	69195
Export duty tax	136	44	10	0	0
Import duty tax	2834	4090	3439	5134	5526
Total custom revenue	3070	4134	3439	5134	5526
Total custom revenue to GDP (in %)	5.77	7.63	6.66	8.99	7.99

Source: Computed from ECA data, MoFED and NBE Annual Reports

As one can see from the above table at least in the short run the elimination and/ or reduction of tariff revenue adversely affects government revenue as on average it contributes 7.4 percent to GDP. Therefore, the government is required to design other sources to compensate the fiscal deficit to be incurred as a result of accession to WTO.

3.3.6. Governance and Corruption

The WTO system, which aims at making commerce "stable" and "predictive", requires Ethiopia to disclose policies and practices within the country and publish trade rules and regulations and notify WTO. Upon accession she would be obliged to bind her commitments. These bindings amount to ceilings on customs tariff rates. Bound commitments can change but only after negotiations.

There is strong evidence, based on cross country comparisons, that higher levels of corruption are correlated with slower growth and lower level of per capita income[165]. Corruption is very costly. It undermines well- functioning markets in five ways: as tax, as a barrier to entry, it leads to a loss of government revenue, it disrupts the operation of markets and it subverts the legitimacy of the state and its ability to provide institutions that support markets[166].

Membership in WTO should help reduce incentives for corruption by providing countries with what are perhaps the most powerful institutional checks and balances in the international economic sphere. Accession imposes changes both in institutions and policies. As discussed above accession to the WTO provides, once fully implemented, a set of norms which should contribute to the opening of the economy, enhance the transparency of policies and promote the rule of law and the evolution of an independent judicial system. Theory and evidence suggests that openness reduces corruption[167]. Binding market access commitments increased transparency and market based institutions should further reduce rent seeking behavior and corruption. The adherence to internationally acceptable rules for international trade and FDI imposes stricter disciplines on government and indirectly on firms.

Assessment of the impact of WTO accession on institutional quality in the acceding country is difficult and can only be estimated or inferred from business surveys. In addition, many other factors affect the quality of governance. Accession to the WTO is only one of many measures with effect on institutional quality and, most likely, its effect is conditional upon other policies. Moreover the causality may go on both directions; a

[165] Kaufman et al (1999b) pp. 35-49
[166] WB (2001) P. 168
[167] Bonaglia et al (2001), Broadman and Recanatini (2000) and Treisman (2000)

high level of institutional quality will facilitate the accession while the accession promotes good institutional quality[168]. Also it is not of course possible to trace the precise time pattern of the effect of accession. It is quite likely that the institutional quality may be affected long before the actual accession in view of the preparations that the country in question may want to under take in the anticipation of the actual conditions required by the WTO membership.

Given Ethiopia's current institutions quality, it will be mandatory to put better institutional settings into place before accession. Hence, she will face the challenge of putting in place institutions and institutional support to participate in world trade. The institutional framework for the purpose comprise: an effective policy organization for investment and trade, provision of support for export development and promotion, and ensuring that policy reform is properly implemented and anticipating the impact of reform on producers and consumers alike. The present principal public sector institutions dealing with trade are MoTI, MFA and EEPA.

3.3.7. Market Access

Arguably the most important and, undoubtedly ,most visible effect of the WTO on policy- making concerns border measures affecting the flow of exports and imports. These measures are typically visible because they affect market access of acceding country for its exports and the access of foreign firms to the markets of acceding country. Thus, the first type of questions that one can ask about the influence of the WTO on policy making could be: "How does the WTO affect the extent to which markets of Ethiopia has to be opened? Will Ethiopia be 'forced' to take unreasonable

[168] Bonaglia and et al (2001) p. 19

commitments?" The second type of questions concerns trade policies of other countries and their effect in market access of Ethiopia which is also the main focus of the paper. In particular, are trade policies of incumbent WTO members affected by the accession of new members? Is market access for Ethiopia's export improved by accession?

An answer to the first type of questions can be provide by distinguishing between bound and applied tariff rates on imports of manufacturing and agricultural goods. This is because it demonstrates the degree of acceding country's commitments agreed in the WTO (bound rates) as opposed to the rates actually applied in practice. Bound rate is the critical commitment in the WTO. A bound rate higher than applied rate implies that the country in question is actually pursuing more liberal policies towards imports than it was willing to concede under terms of accession. As evidences of other studies indicate currently Ethiopia's effective rates of protection is higher than the existing incumbent WTO member countries' effective rates of protection especially in areas of manufacturing products. Therefore, she would be required to make commitments to reduce tariffs and non tariff barriers; this will apply to all economic sectors from agriculture to industry and services. The challenge here is to ensure that its firms are sufficiently competitive in the face of foreign competition. Therefore, to face this challenge, it will be mandatory for Ethiopia to design appropriate policies including timing of opening of markets for foreigners sector by sector.

Turning to the main concern of the paper, export market access, we observe that Uruguay Round negotiations have resulted in Agreement on a number of important definitions which are also concerns of Ethiopian exports. These definitions include the meaning of 'subsidy', measurement methodologies of domestic support and steps to be taken by

signatory countries in order to clarify and reduce restraints to trade. As discussed in chapter two, the agreement included provisions for greater market transparency and access based on conversion of non tariff barriers to tariffs (referred to as 'tariffication'); reduction of domestic support of the agricultural sector by individual governments; and lowering of export subsidies.

Domestic support programmes were classified into three categories[169]. The first category is the 'Amber Box', which captures all domestic support measures that are considered to distort production or trade. Subsidies under this category are to be reduced or kept within defined limits. Measures and policies classified as 'amber' provide price and income support to producers, often worth tens of thousands of dollars per eligible producer in OECD countries. They include such measures as price supports, marketing loans, payments based on acreage or number of livestock, input subsidies and subsidized credit. Under the provisions of this part of the Agreement on Agriculture, for largest subsidizers, reductions in domestic support will be significant in absolute as well as relative terms. The United States, for example, reduce total Aggregate Measures of Support (AMS)[170] from $23.9 billion (defined as a base) to $19.1 billion.[171] The EU will have reduced from

[169] For more explanations on these concept, one can get more information by downloading at: www.wto.org and http://www.fas.usda.gov/info/factsheets/wto.html/

[170] There are various approaches to tariff reduction. Under the GATT, negotiation on tariff reduction was initially based on a request and offer procedure. Under this approach members negotiate bilateral market access concessions, and subsequently extend them to other members. With relatively small number of negotiating parties and the focus on a limited number of industrial products, members were able to substantially reduce average tariffs. However, the approach was abandoned in favor of a comprehensive formula approach in the Kennedy Round (1964-7). The next round, Tokyo Round (1973-9), introduced the so called Swiss formula. This approach was however abandoned during the Uruguay Round (1986-94) and a more "flexible" approach, AMS, was adopted. This new approach required that, on average, tariff lines, were to be cut by a certain amount. The distribution of the cut across sectors was left for negotiations between trading partners. While achieving substantial tariffs reductions, the Uruguay Round allowed members to protect strategic sectors, and failed to achieve significant reductions in tariff escalation.

[171] Christopher L. Shaw and et al (2000) p.13

76.5 billion euro to 61.2 billion. Canada will have gone from C$ 5.4 billion to C$4.3 billion. Japan will have reduced domestic support from ¥4.3 billion to ¥3.9 billion[172]. Signatory countries have, in fact, agreed not to reduce all of these supports at a time. But they agreed to reduce Total AMS (defining the base as the period 1986-90) by 20% in 2000 in equal installments (including those implemented during the base period). The commitment for developing countries was 13% reduction by the year 2005[173]. Moreover, developed countries agreed to reduce spending on subsidies by 36% over six years and to reduce the quantity of subsidized exports by at least 21% on a commodity –specific basis, relative to a 1986-90 base year. Developing countries agreed to reduce spending on subsidies by 24% over 10 years (by 2004), and the quantity of subsidized exports by 14%[174]. The point here is, however, signatory countries specially developed ones were reluctant to implement the agreement[175]. This clearly shows that trade agreements and negotiations at WTO are implemented at good faith of developed countries. The protection rate of QUAD countries calculated by Cline (2004) as depicted in table below shows high protection rate as percentage of tariff equivalent.

Table 5: Overall Protection in Agriculture (percentage tariff equivalent)

Type of Protection	US	Canada	EU	Japan
Tariffs	8.8	30.4	32.6	76.4
Subsidies	10.2	16.8	10.4	3.2
Total	19.9	52.3	46.4	82.1

Source: Cline (2004) p.64

[172] Ibid pp. 13-14

[173] UNECA (2004): Trade Liberalization Under the Doha Development Agenda: Options and Consequences for Africa, Addis Ababa, Ethiopia, pp. 20-36.

[174] Special and Differential Treatment permits developing countries to make only 2/3 of the reduction percentage required of the developed countries and least developed countries are exempt from reduction. For more information one can refer: USDA/ERS (1998) PP. 20-27

[175] UNECA(2004) p.10

In fact under Doha Development Agenda, the issue is currently reinstated at Hong Kong WTO Ministerial Conference held in December 2005. But many people still question that developed countries will be committed to reduce the domestic support and export subsidies. In line with this argument, Stevens explains as: "far from satisfying the aspirations of developing countries, EU 'liberalization' in agriculture aims to sustain European production but to reshuffle the subsidies and taxes to make them less costly to European budget and more easily defensible in the WTO. The Commission proposal of 2002 seeks to shift 25 billion of direct EU level income support from one type of support to another. This will neither decrease production nor increase market access."[176]

The second category, the Blue Box, covers Payments aimed at limiting production, but exempted from reduction requirements. These are pertained to US deficiency payments under the 1985 Farm Bill and EU area payments and compensation payments under the CAP reform[177]. The final category, Green Box, includes payments that do not distort trade or are considered to cause minimal distortion and do not involve transfers from consumers. These include such measure as support for research, pest or disease control, extension services, inspection, marketing and promotion, crop insurance, natural disaster relief, conservation programs and public stockholding.

Moreover, Article 4 of Agreement on Agriculture commits signatory countries to a number of steps toward fuller market liberalization, which were planned to take six years concluding in 2000 for developed countries and to take 10 years for developing countries. Signatory countries agreed to eliminate quotas, variable levies, discretionary licensing, import bans and other no tariff barriers in favor of a single quantitative tariff. Countries

[176] Stevens (2003) Development Policy Review, 21(5-6) p.674
[177] UNECA (2004) p.17

agreed as well to convert all non-tariff barriers to tariffs based on the difference between the average internal market price (1986-88) and the world price, to bind all tariffs, to reduce all tariffs by an average of 36% for developed countries and by 24% for developing countries, to reduce every tariff by 15% for developed and 10% for developing countries and so on. However, as in the case of the agreement to reduce domestic support, signatory countries in this case also failed to implement agreements; instead by choosing a base year with high tariff rate and restrictive non tariff barriers, they set bound tariff above the existing effective protection rate through 'tariffication' process[178]. The practice of setting high binding rates complicated the problem of measuring the impact of further commitments to reduce bindings. It is clearly indicated in the following table that agricultural tariff rates imposed by QUAD countries ranges from zero to 409 percents.

In fact, these issues will be the concern of Ethiopia after accession partly due in procedurally acceding country is not entitled to negotiate trade polices of incumbent countries and partly due in she is currently enjoying different preferential market accesses as discussed under 3.2. above. Theoretically, to secure stable foreign market access and to reduce the risk of preferential market access erosion, which is also one of the benefits of WTO membership, Ethiopia normally needs to seriously negotiate on these issues. But given developed countries limited commitment to implement agreements and negotiation in WTO, it will not be difficult to predict that the benefit in this regard to Ethiopia will be very limited.

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[178] UNECA (2004): Trade Liberalization Under the Doha Development Agenda: Options and Consequences for Africa, Addis Ababa, Ethiopia pp.20-21

Table 6: Agricultural Tariff Rates (Percent)

Sector	Weight	US	Canada	EU	Japan
Paddy Rice	2.94	4.9	0.0	64.9	409.0
Wheat	2.01	2.6	62.7	61.4	249.2
Cereal Grains	2.76	0.6	8.9	38.6	20.2
Vegetables, Fruits, Nuts	8.63	4.7	1.9	14.5	44.9
Oil Seeds	1.85	17.7	0.0	0.0	76.4
Sugar Cane, Sugar Beet	0.95	0.7	0.0	251.4	0.0
Plant-Based Fibers	0.93	9.7	0.0	0.0	0.0
Crops	3.14	21.5	2.4	3.1	22.1
Cattle, Sheep, Goats Horses	4.03	1.1	0.2	36.6	149.1
Animal Products	5.71	0.6	19.8	6.7	5.0
Raw Milk	3.96	0.0	0.0	0.0	0.0
Wool,Silk-Worm Cococoons	0.45	0.9	2.3	0.0	54.7
Forestry	2.53	0.8	0.7	0.4	0.2
Fishing	2.8	0.6	.04	9	4.9
Bovine Meat Product	4.83	5.3	16.3	88.9	36.4
Meat Product	5.4	3.6	72.4	3..9	58.2
Vegetables Oils and Fats	3.17	4.3	8.6	11.4	6.6
Dairy Products	5.61	42.5	214.8	87.7	287.0
Processed Rice	3.05	5.3	0.7	87.4	409.0
Sugar	1.93	53.4	4.9	76.4	116.1
Food Products	21.73	11.4	14.1	28.8	38.3
Beverages Tobacco Products	11.59	3	62.5	8.3	16.2
Total	**100**	**8.8**	**30.4**	**32.6**	**76.4**

Source: Cline (2004) p.56

As described under section 3.1.3.2; EU member countries, Japan, COMESA member countries and US are the major Ethiopian export destinations. Agricultural domestic support programs and setting high bound tariff rate as compared to the existing one by these countries adversely affect the export prices of Ethiopian exports. These countries are, therefore, expected to be among interested parties during concession process for Ethiopia's accession to WTO.

CHAPTER FOUR

4. Model Specification and Estimation Techniques

In this chapter, as a continuation from the last section focuses on specification of the model to be employed for the estimation of the impact of WTO accession on Ethiopia's foreign trade market access.

4.1. Alternative Modeling Approaches

There are various modeling approaches that could be used for quantitative analysis of trade policy reform. Model structure range from simplified partial equilibrium representations of a single industry through large scale general equilibrium representation of the global economy. Important characteristics of all quantitative models require assumptions imposed by the structure of the model. The model structure must be transparent so that the results are easy to interpret.

The other key issues include data availability and how the model defines each variable. For policy makers the value of estimation results often depends on how key variables are treated in the model. That is, each variable must be defined as either endogenous or exogenous to the system. Endogenous variables are market outcomes determined by the estimation of the model and exogenous variables are market developments imposed on the estimation at predetermined fixed values.

There are three commonly used models to estimate the impact of multilateral or regional trade Agreements on foreign trade of a country. These are econometric models, CGE models and gravity models. Therefore; in the following section, these modeling approaches will be described in brief.

4.1.1. Econometric Models

It is the objectives that guide the development of an econometric model. One of these objectives could be an econometric model should be suitable for both forecasting and policy simulation. It should also be able to run simulations of policy and other scenarios under a variety of assumptions about how households, firms and financial markets form expectations including the extent of available information. The other is conceptual design. Expectations should be explicit. Structural equations for households, firms and financial markets should be based on economic theory of optimizing behavior[179]. Unlike other models, it concentrates on specific sector or industry.

Estimations of equations in the model should be based on modern econometric estimation techniques. Therefore, based on macro economic theory one can choose the left hand side and right hand side variables for stochastic equations in the model. Hence based on the objective of the research, the assumptions made may differ.

4.1.2. Computable General Equilibrium (CGE) Models

The main reason to use a CGE model is to provide a quantitative evaluation of the effects of government policies. A CGE model is basically a large set of demand and supply functions that cover every market, both for commodities and factors of production in the economy[180].

The demand side of commodity market is comprised of private households, government agents and firms. Some of these agents are domestic and some are foreign and therefore capture export demand. Private households are able to buy only as much as their income allows them. They receive this income as they sell labor services to firms but they also

[179] Jeffrey D. Sachs and Andrew M. Warner (1995) pp.54-61
[180] Whally and Wooton (1995) pp. 9-27

receive a return on any capital investment that they have made. In addition to participating in the regulatory process the government has a number of tax and subsidy instruments available for redistributive uses. As private households sell their labor and capital services to firms, it enables firms to produce. In addition to buying these primary production factors, firms also buy intermediate inputs from each other. Commodity purchases by all agents comprise both imported and domestically produced goods.

Based on these general features, in the last 20 years or so, an enormous number of practically useful CGE models have been developed to study a wide range of policy areas in which simpler, partial equilibrium tools would not be satisfactory. Equilibrium models have been used to study a variety of policy issues including tax policies, development plans, agricultural programs, international trade energy and environmental policies and so on. A range of mathematical formulations and model solution techniques have been used in these modeling experiences.

The advantages of computable general equilibrium models for policy analysis compared to traditional macro-economic models are now widely admitted. The general equilibrium models allows for consistent comparative analysis of policy scenarios by standardizing their outcome around the concept of an equilibrium point fulfilling the same consistency criteria. In addition the computable general equilibrium models incorporate micro-economic mechanisms and institutional features within a consistent macro-economic framework and avoid the representation of behavior in reduced form. This allows analysis of structural change under a variety of assumptions.

However, CGE models have two drawbacks: they are simulated rather than estimated and they are almost always based on a very large block box consisting of dozens to hundreds

of equations. The first characteristics make it difficult to know how reliable is the simulation model while the second characteristics make it difficult to evaluate what drives the findings[181]. Many CGE models have been developed by scholars like CGE derived from Walrasian general equilibrium, GTAP Models, the Michigan -Brown-Stern Production and Trade CGE model[182] and so on.

4.1.3. Gravity Model

Newton formulated his law of gravity in 17th century stating that the attraction between two bodies is directly proportional to the product of masses and inversely proportional to the square distance between those bodies. Much later the same idea was employed in social sciences in general and particularly in economics. Especially successful was the use of gravity model in explaining patterns of international trade[183].

Although later the model was tested for flows of foreign direct investment and labor migration, trade flows remained the most frequently explored object with the gravity model. Researchers attempted to originate empirically successful model from trade theories and micro economics. Anderson (1979) derived gravity equation using assumption about world with product differentiation. He did not discriminate between international trade theories in his specification. Helpman and Krugman (1985) showed that the basic gravity equation could be derived from the differentiated products trade theory[184]. Deardorff (1995) established that the gravity model is also consistent with the

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[181] Ibid p.36

[182] Equations and derivations of the Model can be found at: http://www.spp.umich.edu/rsie/model/

[183] Tinmbergen (1962)

[184] Their theory suggests that flows of goods depend on the demand in the importing country and the supply of differentiated products from the exporting country. For further concept see any International Trade Books.

Heckscher-Ohlin international trade theory[185]; the idea of gravity became very popular in explaining volumes and patterns of trade. Even though the debate on the theoretical grounds of the model continues, it is more or less clear that whether because of the monopolistic competition nature of industries or because of comparative advantage and countries' specialization trade flows obey the law of gravity.

a) The Simple Version of Gravity Model

Based on the following basic assumptions, Scholars[186] derived the simple Gravity Model. But in this section, special emphasis is given to the derivation approach of Feenstera (2004):

1. There is free trade so that all countries have identical prices. Then it follows that a good produced in any country is sent to all other countries in proportion to the purchasing country's GDP.
2. Countries are specialized in different varieties of a final product.
3. Demand is identical and homothetic across countries.
4. There is no tariff and transportation costs.
5. Trade is balanced in each country.

Consider a multi-country framework, where i, j=1…N denotes countries, and k=1…N denotes products (any variety of a good counts as a distinct product). Let y^i_k denotes country i's production of good k. Since prices are the same across all countries, we normalize them to unity, so y^i_k actually measures the value of production. The total GDP in each country is measured by:

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[185] Their theory argues that a country will have a comparative advantage in, and therefore export, the good that uses its relatively abundant factor intensively in production. For more detail on the theory see Bowen and et al (1998), Feenstera (2004) or any standard International Trade books.

[186] See Feenstera (2004), Bergstrand (1985) and so on.

$Y^i = \sum y_k{}^i$ ---------- [1], and world GDP is:

$Y^w = \sum Y^i$ ---------- [2]

Let s^j denote country $j^{'s}$ share of world expenditure. Assuming that trade is balanced in each country, the s^j also denotes country j's share of world GDP, so that:

$s^j = Y^j/Y^w$ ---------- [3] and

similarly,

$s^i = Y^i/Y^w$ ---------- [4]

Under the assumption that all countries are producing different products, and demand is identical and homothetic, the exports from country i to country j of product k are given by:

$X^{ij}{}_k = s^j y^i{}_k$ ---------- [5], and

similarly

$X^{ji}{}_k = s^i{}_{y^j}{}_k$ ----------[6]

Summing over all products k, we obtain:

$X^{ij} = \sum x^{ij}{}_k = s^j \sum y^i{}_k = s^j Y^i = Y^j Y^i/Y^W = s^j s^i Y^w = X^{ji}$ ----------[7]

Summing the first and last of these terms, we therefore find that bilateral trade between two countries equals:

$X^{ij} + X^{ji} = (2/Y^w) Y^j Y^i$ ----------[8]

[8] gives over simplest derivation of the gravity equation where the bilateral exports from country i to country j are proportional to the product of their GDP's.

"In its simplest form, the gravity equation states that the bilateral trade between two countries is directly proportional to the product of countries GDP's. Thus larger countries will tend to trade more with each other and countries that are not similar in their relative sizes will also trade more. This equation performs extremely well empirically, as has been known since the original work of Tinbergen (1962)."[187]

b) Border Effects in the Gravity Model

When there are border effects such as transport costs or tariffs (trade policy in general),then it is no longer the case that prices are equalized across countries so the pattern of trade is more complex than in the gravity equation [8]. Anderson and Wincoop (2003) decompose trade barriers into three components: the bilateral trade barrier between country i and j, country i's barrier to trade with all countries and country j's barrier to trade with all countries. In this study, the focus is on the later case. The following derived gravity model is also made inline with this concept. Therefore, the major assumptions of border effects of Gravity Model include:

1) There is identical and homothetic consumer preferences approximated by a constant elasticity of substitution (CES) utility function.

$$U_j = \{[(\sum^{N}{}_{K} X^{\theta j}{}_{kj})^{1/\theta j}]^{\psi j} + X^{\psi j}{}_{jj}\}^{1/\psi j} \quad \text{---------- [9]}$$

Where j= 1 ... N and X_{kj} (X_{jj}) is the amount of k's aggregate good (j's domestically produced good) demanded by j's consumers, $\psi_j = (\mu_j - 1)/\mu_j$ where μ_j is the CES between domestic and importable goods in j ($0 \leq \mu_j \leq \infty$), and $\theta_j = (\delta_j - 1)/\delta_j$, where δ_j is the CES

[187] Feenstera (2004): Chapter five P: 11

among importable in j ($0 \leq \delta_j \leq \infty$). According to Jeffery H. Bergstrnd (1985), this specification allows the elasticity of substitution between domestic and importable goods and that among importables to differ. Equation [9] simplifies to a standard CES function when μ_j and δj are constrained to be equal.

2) Expenditures in country j are constrained by income:

$Y_j = \sum^{N}_{k} P_{kj} X_{kj}$, where j = 1 ... N ---------- [10],

and

$P_{kj} = P_{kj} T_{kj} C_{kj}/E_{kj}$ ---------- [11]

Where P_{kj} is the k-currency price of k's product sold in the j^{th} market (and assumed to be constant), T_{kj} is one pulse j's tariff rate on k's product ($T_{jj} = 1$), C_{kj} is the transport-cost (c.i.f. /f.o.b.) factor to ship k's product to j ($C_{jj} = 1$), and E_{kj} is the spot value of j's currency in terms of k's currency ($E_{jj} = 1$). Henceforth, $\sum''$ will denote summation over k=1... N, k≠j. Maximizing [9] subject to [10] under conditions of [11] generates N (N+1) first order conditions that are solvable for N (N-1) bilateral aggregate import demand equations[188].

$X_{ij}^{D} = Y_j P_{jj}^{-\delta} [(\sum'' P_{kj}^{1-\delta})^{1/(1-\delta)}]^{\delta-\mu} \times \{[(\sum_{kj}'' P^{1-\delta})^{1/(1-\delta)}]^{1-\mu} + P_{jj}^{1-\mu}\}^{-1}$ i,j = 1 ... N(≠j) --- [12]

and N domestic demand function equations.

$X_{jj} = Y_j P_{jj}^{-\mu} \{[(\sum'' P_{kj}^{1-\delta})^{1/(1-\delta)}]^{1-\mu} + P_{jj}^{1-\mu}\}^{-1}$, j = 1 ... N ---------- [13]

3) In each country i in each year, firms maximize the profit function. Thus,

$\Pi_i = \sum_k^N P_{ik} X_{ik} - W_i R_i$, i = 1 ... N ----------[14]

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[188] The concept of derivation is mainly taken from Jeffrey H. Bergstrand (1985) and Feenestera (2004)

Where R_i is the amount available of the single, internationally immobile resource in a given year outputs and W_i is the i-currency value if a unit of R_i.

4) R in each country is allocated according to the constant-elasticity-of- transformation (CET) joint production surface.

$$R_i = \{[(\sum_k{}^N X_{ik}{}^{\Phi})^{1/\Phi}]^{\delta} + X_{ii}{}^{\delta}\}^{1/\delta}, \quad i = 1 \ldots N \text{ ---------- [15]}$$

Where $\delta = (1+\eta)/\eta$ where η is i's CET between production for home and foreign markets ($0 \leq \eta_i \leq \infty$) and $\Phi_i = (1+\gamma)/\gamma$ where γ_i is i's CET for production among export markets ($0 \leq \gamma \leq \infty$). This specification allows the elasticity of transformation of supply between home and foreign markets and that among foreign markets to differ. Equation [15] simplifies to a standard CET function when η and γ are constrained to be equal. Henceforth, $\sum'$ will denote summation over k = 1 ... N, $k \neq i$. By substituting [15] in [14] and maximizing the resulting equation yields N^2 first order conditions that are solvable for N (N-1) bilateral aggregate export supply equations.

$$X_{ij}{}^S = Y_i P_{ij}{}^{\gamma} [(\sum{}' P_{ik}{}^{1+\gamma})^{1/(1+\gamma)}]^{-(\gamma-\eta)} \times \{[(\sum{}' P_{ik}{}^{1+\gamma})^{1/(1+\gamma)}]^{1+\eta} + P_{ii}{}^{1+\eta}\}^{-1} \text{ --------- [16]}$$

i, j = 1 ... N ($i \neq j$) and N domestic supply equations.

$$X_{ii}{}^S = Y_i P_{ii}{}^{\eta} \{[(\sum{}' P_{ik}{}^{1+\gamma})^{1/(1+\gamma)}]^{1+\eta} + P_{ii}{}^{1+\eta}\}^{-1}, \quad i = 1 \ldots N \text{ ---------- [17]}$$

Where, with one factor of production national income in I in constrained by:

$$Y_i = W_i R_i, \quad i = 1 \ldots N \text{ ---------- [18]}$$

Therefore; at equilibrium assuming N^2 equilibrium conditions:

$$X_{ij} = X_{ij}{}^D = X_{ij}{}^S, \quad i, j = 1 \ldots N \text{ ----------[19]}$$

Where X_{ij} is the actual trade flow volume from i to j. Equations [10] - [13] and [15] - [19] produce a general equilibrium model of world trade with $4N^2 + 3N$ equations and endogenous variables.

The reduced form for X_{ij} from this system would be a function of every R_i (i = 1 ... N), T_{ij} and C_{ij} (i,j= 1 ... N, $i \neq j$). Yet such a function is not a gravity equation, since this reduced form necessarily excludes endogenous exporter and importer incomes.

5) Market for the aggregate trade flow from i to j is small relative to the other N^2-1 markets. This is analogous to the small open economy assumption frequently used in international finance studies, which implies that the foreign price level, the foreign interest rate, and foreign income can be treated as exogenous. The small market assumption implies that variations in X_{ij} and P_{ij} to equilibrate X_{ij}^D and X_{ij}^S have negligible impacts on Y_i, Y_j , P_{ii} , P_{jj} , $\sum' P_{ik}^{1+\gamma}$ and $\sum'' P_{kj}^{1-\delta}$. The general equilibrium system of $4N^2 + 3N$ equations can then bi considered N^2 partial equilibrium subsystems of 4 equations each in four endogenous variables (X_{ij}, X_{ij}^D ,X_{ij}^S ,P_{ij}) and 3N constraints. Combining one each of [12] and [16] with one of [19] yields:

$$P_{ij} = \{Y_i^{-1} Y_j C_{ij}^{\delta} T_{ij}^{\delta} E_{ij}^{\delta} \times (\sum' P_{ik}^{1+\gamma})^{\gamma-\eta/(1+\gamma)} \times (\sum'' P_{kj}^{1-\delta})^{(\delta-\mu)/(1-\delta)} \times [(\sum' P_{ik}^{1+\gamma})^{(1+\eta)/(1+\gamma)} + P_{ii}^{1+\eta}]$$

$$\times [\sum'' P_{kj}^{1-\delta})^{(1-\mu)/(1-\delta)} + P_{jj}^{1-\mu}]^{-1}\}^{1/(\gamma+\delta)} \quad \text{----------[20]}$$

and

$$X_{ij} = \{Y_i^{\delta} Y_j^{\gamma} C_{ij}^{-\gamma\delta} T_{ij}^{-\gamma\delta} E_{ij}^{\gamma\delta} \times (\sum' P_{ik}^{1+\gamma})^{-\delta(\gamma-\eta)/(1+\gamma)} \times (\sum'' P_{kj}^{1-\delta})^{\gamma(\delta-\mu)/(1-\delta)} \times [(\sum' P_{ik}^{1+\gamma})^{(1+\eta)/(1+\gamma)}$$

$$+ P_{ii}^{1+\eta}]^{-\delta} \times [(\sum'' P_{kj}^{1-\delta})^{(1-\mu)/(1-\delta)} + P_{jj}^{1-\mu}]^{-\gamma}\}^{1/(\gamma+\delta)} \quad i,j = 1 \ldots N(i \neq j) \text{ ----------[21]}$$

The small market assumption yields a reduced form bilateral trade equation with Y_i and Y_j treated exogenously. A consequence of this assumption is that certain price terms are also treated exogenously.

6) An assumption of identical utility and production functions across countries ensures that parameters in [20] and [21] are constant across all country pairings. This assumption

is common to trade analysis[189]. Therefore, combining [20] and [21] along with the assumption, we get:

$$PX_{ij} = Y_i^{(\delta-1)/(\gamma+\delta)} Y_j^{(\gamma+1)/(\gamma+\delta)} C_{ij}^{-\delta(\gamma+1)/(\gamma+\delta)} \times T_{ij}^{-\delta(\gamma+1)/(\gamma+\delta)} E_{ij}^{\delta(\gamma+1)/(\gamma+\delta)}$$

$$X \left(\sum' P_{ik}^{1+\gamma}\right)^{-(\delta-1)(\gamma-\eta)/(1+\gamma)(\gamma+\delta)} \times \left(\sum'' P_{kj}^{1-\delta}\right)^{(\gamma+1)(\delta-\mu)/(1-\delta)(\gamma+\delta)} \times \left[\left(\sum' P_{ik}^{1+\gamma}\right)^{(1+\eta)/(1+\gamma)}\right.$$

$$\left. + P_{ii}^{1+\eta}\right]^{-(\delta-1)/(\gamma+\delta)} \times \left[\left(\sum'' P_{kj}^{1-\delta}\right)^{(1-\mu)/(1-\delta)} + P_{jj}^{1-\mu}\right]^{-(\gamma+1)/(\gamma+\delta)} \text{----------[22]}^{190}$$

Where PX_{ij} is the value of the trade flow from i to j ($PX_{ij} = P_{ij}X_{ij}$). Equation [22] is termed as general gravity equation by Bergstand (1985).

4.2. Model Specification

In this study, the researcher employed gravity model because it is relatively simple and the required data are available. More than all, empirical literatures proved that it is robust to explain trade flows. Of course, literature on gravity was concentrated on the elaboration of the right econometric specification and amending the equation with new variables[191]. A comparatively bigger portion of research was based on the aggregate trade flows. Some authors analyzed trade flows at the level of separate industries testing the theory of bilateral trade with differentiated products[192].

However, I specify a Gravity model that builds on the conventional Tinbergen (1962) and Linneman (1966) bilateral trade of gravity model in such away that aside the standard variables of gravity model I add an indicator of trade liberalization to the estimating equation. In other words, I specify a gravity model type of equation [22] after some manipulations.

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[189] The assumption of identical utility and production functions across countries is common to trade analysis including Heckscher-Ohlin-Samuelson model of interindustry trade and intraindustry trade of Dixit and Norman (1980).

[190] Full derivation of the equation can be found from Bestrand (1985)

[191] Baldwin (1994), Matyas (1997) and Berstrand (1985)

[192] Bergstrand (1985)

Therefore, the specification of the gravity model is as follows:

$X_{ij} = \alpha (Y_i)^{\beta}(Y_j)^{\gamma}(D_{ij})^{\delta} (FTP_j)^{\theta}U_{ij}$----------[23]

In logarithmic form, it can be re-written as:

$\ln X_{ij} = \alpha + \beta \ln Y_i + \gamma \ln Y_j + \delta \ln D_{ij} + \theta \ln FTP_j + \mu \ln DummyCOMESA + U_{ij}$ ---------- [24]

Where; Xij represents exports of Ethiopia to its trade partner j to the rest of the world,

Y_i represents gross value of the GDP of Ethiopia,

Y_j represents gross value of the GDP of country j,

FTP_j represents foreign trade policy of country j,

D_{ij} represents distance between Ethiopia and country j, and

DummyCOMESA represents dummy for COMESA member countries

U_{ij} represents stochastic term a log-normally distributed error with $E(\ln U_{ij}) = 0$.

The constants β and γ are expected to be positive and significant as gravity model hypothesizes. The constant μ is also expected to be positive as Linder's hypothesis[193] formulates and adjacency COMESA member countries relative to others; whereas, δ is expected to be negative and significant as gravity model predicts that trade flows is negatively related to trade barriers between trade partners. And the sign of θ depends on how trade policy indicator included in the model is rated.

There are many foreign trade policy indexes developed by different economists. Dollar (1992), Sacks and Warner (1995), Harrison (1996), Edwards (1997) and Greenaway and et al (2002) are some of the contributors. These indexes are Sacks and Warner Openness Index, Trade Dependency Ratio index, Heritage Foundation Index, Economic Freedom of

[193] Linder's hypothesis predicts that the more similar the demand structures of two countries are, the more intense the potential trade between them will be. As an index for this similarity, Linder takes the similarity of income levels, since, in his opinion; there is a strong relationship between income levels and the types of commodities demanded.

the World index, Collected Trade Tax Ratio index, Average Coverage of Non tariff Barriers index, Average Import Tariff on Manufacturing index, Average Black Market Premium index, World Development Outward Orientation Index, Leamer Openness Index, Wolf index of Import Distortions and so on. Given the complexity commercial policy which can be affected by tariffs, quotas, licenses, prohibition, exchange controls, and so on ; scholars argue that attempts to use (and construct) a single indictor of trade orientation may be futile and tend to generate disagreements and controversies.[194] Therefore, relying on one o two of these of trade policy index would be risky to draw sound conclusions. This is especially true since Pritchett (1996) has demonstrated that a number of different measures of trade policy indexes are mutually uncorrelated.

Therefore, to minimize this problem and draw sound conclusions from empirical results, I used three trade policy indexes using different samples and periods. These are Heritage Foundation index, Economic Freedom of the World index and Trade Dependency ratio index. These indexes are selected because Economic Freedom of the World is relatively comprehensive measure, Heritage Foundation Index is assumed to indicate policy-induced trade distortions and Trade Dependency Ratio, despite its shortcoming, remained one of the widely used indexes due to data availability. Moreover, I couldn't get data on other indexes.[195] Hence, in the following sections, brief descriptions on these three indexes are made.

4.2.1. Heritage Foundation Index of Distortion in International Trade

The Heritage Foundation has created an index of overall 'economic freedom'. This measure runs from one which signifies institutions and policies most conducive to

[194] For further concepts and explanations see Edwards (1997) and Rose (2002)
[195] Components and variables used in developing and calculating other indexes can be found from Dollar (1992), Edwards (1997), Harrison (1996), Greenaway and et al (2002), and Rose (2002).

economic freedom through five which signifies least conducive. That is, the index ranges from one for free to five for repressed. The index comprises trade, fiscal burden, government intervention, monetary policy, foreign investment, banking, wages and prices, property rights, regulation and informal sector.[196]Heritage foundation index of distortion in international trade, therefore, takes value from one to five and measure the extent to which the government policy distorts trade. It classifies countries into five according to the degree of tariff protection in the country non tariff barriers, and corruption in the custom service[197]. As a high value of the index shows a negative impact on trade flows, the expected sign of the coefficient of trade policy in equation [24] above is negative. Therefore, equation [24] for empirical estimation can be re-written as:

$$\ln X_{ij} = \alpha + \beta \ln Y_i + \gamma \ln Y_j + \delta \ln D_{ij} + \theta \ln HFTPI_j + \mu \ln DummyCOMESA + U_{ij} \quad \text{----------[25]}$$

Where, $HFTPI_j$ represents heritage foundation index of distortion in international trade.

4.2.2. Economic Freedom of the World Index of International Trade

Economic freedom of the world comprises: size of the government, legal structure and security of property rights, access to sound money, freedom to trade internationally and regulation of credit, labor and business[198]. This measure runs from one to ten. A higher value denotes a lower degree of policy intervention of governments. Therefore, freedom to trade internationally as indexed by The Fraser Institute, also incorporates of:(1) taxes on international trade which includes revenue from taxes on international trade as a percentage of exports plus imports, mean tariff rate and standard deviation of tariff rates, (2)regulatory trade barriers which includes hidden import barriers-no other barriers than

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[196] Detail description on these variables can be found at: http://www.heritage.org/research/features/index

[197] See O'Driscoll et al (2002a) and Johnson and Sheehy (1996)

[198] For further information on these concepts, one can access at: http://www.freetheworld.com and Gwartney and et al (2004).

published tariffs and quotas, and cost of importing the combined effect of import tariffs, license fees, bank fees and the time required for administrative red-tape raises costs of importing equipment, (3)actual size of trade sector compared to expected size, (4) difference between official exchange rate and black market rate, and (5) international capital market control which includes access of citizens to foreign capital markets and foreign access to domestic capital markets and restrictions on the freedom of citizens to engage in capital control .

In this case, expected sign of the coefficient of trade policy in equation [24] above is positive. The equation is re written for empirical estimation as:

$$\ln X_{ij} = \alpha + \beta \ln Y_i + \gamma \ln Y_j + \delta \ln D_{ij} + \theta \ln EFW_j + \mu \ln DummyCOMESA + U_{ij} \quad \text{----------[26]}$$

Where, EFW_j indicates economic freedom of the world international trade index of country j.

4.2.3. Trade Dependency ratio

Aggregate trade to GDP ratio is the third alternative used to proxy trade policy. The higher the value of the ratio is, the lesser the intervention of government in international trade is. Therefore, expected coefficient of the trade policy index in equation [24] above is positive. Hence, the equation can for empirical estimation be re-written as:

$$\ln X_{ij} = \alpha + \beta \ln Y_i + \gamma \ln Y_j + \delta \ln D_{ij} + \theta \ln TGDPR_j + \mu \ln DummyCOMESA + U_{ij} \quad \text{----------[27]}$$

Where, $TGDPR_j$ represents aggregate trade to GDP ratio of country j.

4.3. Data

Data are collected in such a way that continuous exports and availability of data on all variables during the period included in the study were the major criterion used to include country into the sample. As more time is considered from the past, availability of data on

some variables especially data on foreign trade policy index on some countries are limited. Moreover, Ethiopian export markets showed a declining trend as more time is considered from the past. Therefore, to deduce sound conclusions from the empirical results, choosing appropriate period time to include as many countries as possible into the sample is important. Accordingly, a maximum and minimum period of nine years (1995-2003) and four years (2000-2003) are considered, respectively. And 31 countries are included into the sample.[199]

4.3.1. Export (Xij)

Export data are mainly collected from Ethiopian Custom Authority (ECA). The authority provided me the data in a softcopy for horizons of periods. In fact, to cross check the data, I, to some extent, used IMF's world trade direction statistics data and various NBE's Annual reports. Moreover, to change the value of exports into US dollar equivalent, average official exchange rate against dollar was taken from IMF's International Financial Statistics data. Based on the criterion stated above, 31 countries and 9 years period is considered for the estimation of the model. A minimum of 31 countries and 4 years data were included into the sample for estimation. Of these countries, in general more than 96 percent of them are currently members of WTO. The statistical summary of export data are summarized in the following table.

[199] Lists of these countries are annexed.

Table7: Statistical Summary of Export data

Statistical Summary	Mean	Standard Deviation	Skewness	Kurtosis	Number of Observations	Number of Countries
Export (1995-2003)	1.10e+07	2.05e+07	3.52	17.89	279	31
Export (2000-2003)	1.02e+07	1.54e+07	2.52	10.84	124	31

Source: Computed from the data Using Stata- Version 9 of Statistics Software Package

A maximum of seventy eight and a minimum of sixty six percent of total Ethiopian export are covered in the study. Detail of the data parentage used in the analysis across period is summarized in the following tables.

Table 8: Percentage of Export Data used for Empirical Analysis (1995-2003)

Period	1995	1996	1997	1998	1999	2000	2001	2002	2003
Export	76.6	72.71	77.78	77.29	68.91	70.93	66.71	72.01	66.02

Source: Computed from the data

4.3.2. Distance (Dij)

Data on the distance between Ethiopia and her trade partner countries are collected based on the distance between Addis Ababa city and capital of these countries[200]. Therefore, these data are available from: www.indo.com/distance or http://americandigest.org/mt-

[200] In a gravity model distance between countries is the distance between the economic centers of countries, which is usually the distance between their capitals.

archives/005714.php or http://www.mapcrow.info/cgi-bin/cities-distance.cgi . The distances are available both in kilometers and miles. But I used distance in kilometers for estimation of the model. Statistical summary of these countries are summarized in the following table.

Table 9: Statistical Summary of Data on Distance

Statistical Summary	Mean	Standard Deviation	Skewness	Kurtosis	Number of Observation	Number of Country
1995-2003	6037.93	2524.96	0.81	3.55	279	31
2000-2003	6037.93	2524.96	0.81	3.55	124	31

Source: Computed from the data using Stata-Version 9 of Statistical Software Package

4.3.3. Gross Domestic Product (Y_j and Y_i)

Gross domestic product data are available from World Bank, World Development Indicators, 2004 which also available from: http://devdata.worldbank.org/data-query . Of course, the same data is available from International Monetary Fund, International Financial Statistics, 2004. Statistical summary of this variable is summarized as follows.

Table 10: Statistical Summary of Gross Domestic Product Data

Statistical Summary	Mean	Standard Deviation	Skewness	Kurtosis	Number of Observation	Number of Country
Y_j 1995-2003	1.15e+12	6.05e+12	14.78	235.61	279	31
Y_i 1995-2003	6.17e+10	4.0e+08	-0.52	2.34	279	1(Ethiopia)
Y_j 2000-2003	1.60e+12	8.88e+12	10.39	112.72	124	31
Y_i 2000-2003	6.44e+09	2.26e+08	-0.94	2.21	124	1(Ethiopia)

Source: Computed from the data using Stata-Version 9 of Statistics Software Package

4.3.4. Foreign Trade Policy ($HFTPI_j$, EFW_j, and $TGDPR_j$)

Heritage Foundation Index of distortion in international trade data is available from http://www.heritage.org/research/features/index/downloans/academicuserGuide.pdf . Data on Economic Freedom of the World Index of International Trade is available from: http://www.freetheworld.com . Data on trade dependency ratio is available from World Bank, World Development Indicators, 2004. Alternatively, it can be accessed from: http://devdata.worldbank.org/data-query . International Monetary Fund, Directions of Trade Statistics, 2004 is also another option from where to get the data. The summary statistics of these indexes are summarized below.

Table 11: Summary Statistics of Foreign Trade Policy Index

Statistical Summary	Mean	Standard Deviation	Skewness	Kurtosis	Number of Observations	Number of Country
HFTPI 1995-2003	2.84	1.10	0.70	2.63	279	31
EFW 1995-2003	7.2	1.45	-0.77	3.27	279	31
TGDPR 1995-2003	153.34	1255.72	16.54	275.48	279	31
HFTPI 2000-2003	2.75	1.05	0.86	3.03	124	31
EFW 2000-2003	7.72	1.04	1.08	-0.70	124	31
TGDPR 2000-2003	154.63	64.81	2.07	6.75	124	31

Source: Computed from the Data Using Stata-Version 9 of Statistics Software

Correlations and covariances matrix of foreign trade policy indexes are also summarized in the following tables. A correlation between the indexes in the two sample periods ranges from 7 percent to 67 percent. Therefore; as previously stated, the result reconfirmed that correlation between foreign trade policy indexes are not satisfactory; in this case the correlations between TGDPRj and HFTPIi during the two sample periods are 7 percent and 43 percent. Moreover, despite the fact that both EFW_j and $TGDPR_j$ are

rated upward to show country j's foreign trade policy conduciveness and openness, the correlation result of the sample period 1995-2003 is found to be negative.

Table 12: Correlations and Co variances of Foreign Trade Policy Indexes (1995-2003)

Foreign Trade Policy Index	$HFTPI_j$	EFW_j	$TGDPR_j$
$HFTPI_j$	1	-0.67	-0.07
EFW_j	-0.67	1	-0.11
$TGDPR_j$	-0.07	-0.11	1

Source: Computed from the Data Using Stata-Version 9 of Statistics Software

Table 13: Correlations and Co variances of Foreign Trade Policy Indexes (2000-2003)

Foreign Trade Policy Index	$HFTPI_j$	EFW_j	$TGDPR_j$
$HFTPI_j$	1	-0.75	-0.43
EFW_j	-0.75	1	0.60
$TGDPR_j$	-0.43	0.60	1

Source: Computed from the Data Using Stata-Version 9 of Statistics Software

4.4. Estimation Techniques

The nature of the data, as described above, is cross sectional time series. Therefore, to estimate the equation, employing appropriate model for panel data analysis[201] is important. Among the various cases of panel data analysis; pooled regression, fixed and random effect models are the most frequently used ones. In the specified model, however, there are time invariant variables (i.e. distance and comesadum). Hence, employing fixed effect model drops these variables from estimation.

Pooled regression and random effect models are the two panel data analysis employed for estimation. Pooled regression is where time series and cross sectional observations are combined or pooled together. "When dealing with cross-section and time series data, where each individual or country cross section sample is small so that sharp inferences about the coefficients are not possible, it is a common practice in applied work to pool all data together, and estimate a common regression. The basic motivation for pooling time series and cross section data is that if the model is properly specified, pooling provides efficient estimation, inference and possibly prediction."[202] Therefore, employing pooled regression is one possible option to estimate the data.

Random effect model of panel data analysis is viewed as one in which investigators make unconditional or marginal inferences with respect to the population of all effects. That is, if an experiment involves large numbers of individuals who are considered a random sample from some larger population, then random effects are more appropriate. The fact

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[201] Panel data set is one that follows a given sample of countries or individuals over time, and thus provides multiple observations on each country or individual in the sample. For more information on this concepts and mathematical aspects, one can refer: William H. Greene (2003) pp. 283-334 and Badi H. Baltagi (2001), and Gujarati (1995) 3rd ed pp. 522-529.

[202] Gujarati D. 3rd ed. (1995) pp. 523-524. In fact, it acknowledged that original work belongs to: H.D. Vinod and Aman Ullah, (19981): Recent Advances in Regression Methods, Marcel Dekker, New York, pp.259-261.

that countries included in the sample are both representative and major importers of Ethiopia's commodities, employing random effect in estimating the equations is also another option.

To test for data compatibility into random effect model as compared to pooled regression, Lagrange multiplier (LM) test is used. Breusch and Pagan (1980) have devised a Lagrange multiplier (LM) test for the random effect model based on the OLS residuals[203]. Under the null hypothesis, LM is distributed as chi-square with one degree of freedom. The null hypothesis is that there is a single constant term in the regression model. That is, the null hypothesis is in favor of pooled regression. Rejection of the null hypothesis is in favor of the appropriateness of the random effect model[204].

In running the estimation of the models, I employed both the pooled regression and random effect model. In fact, I conducted LM test as described above.

[203] Greene W. (2003) 5th ed. pp.298-299 and Baltagi H. (2001) 2nd ed pp. 58-59
[204] Greene W. (2003) 5th ed. P.299

CHAPTER FIVE

5. Analysis of Empirical Results

The regression results are summarized in four tables. In the first two tables, results of random effect and pooled OLS models are summarized for the sample period 1995-2003. For the sample period 2000-2003, the same summary report is made on two tables. The importance of two sample periods, as explained in the last chapter, is to see if there is any change in results due to preferential trade of EBA initiatives and AGOA on Ethiopia's export. In each table, the results of employing alternative trade policy indicators are summarized.

5.1. Basic Results of Sample Period 1995-2003

The regression results show that the variables are acceptably significant, except dummy for COMESA member countries. Moreover, all variables are with expected signs. According to estimate of random effect model, which is tested that it is appropriate model to estimate the equation, Ethiopia will export 163percent (EFWj), 170 percent (TGDPRj) and 174 percent (HFTPIj) less to the market due to physical barriers. Increase of Ethiopia's GDP by 10 percent would lead to an increase of exports b 50.3 percent (HFTPIj), 51.4 percent (TGDPRj) and 46.4 percent (EFWj). Interestingly, the coefficients of Ethiopia's GDP under alternative trade policy indicators are almost similar. While ten percent growth of GDP of trade partners result in 91 percent (HFTPIj), 98 percent (TGDPRj) and 88 percent (EFWj). This result s also interesting as its effect under the three trade policy indicators almost lead to the same conclusion.

In order to interpret estimate for dummy variable, we have to transform it, taking antilog and subtracting one. This is because in estimating the equation, other variables were in

logarithm form. Accordingly, results show that Ethiopia would exports to COMESA member country by 26 percent (HFTPIj), 23 percent (TGDPRj) and 20 percent (EFWj) more than to other countries. From this, one may deduce that fully integrating into COMESA will positively affect Ethiopia's export. From this one can deduce that fully integrating into COMESA will positively affect Ethiopia's export.

Turning to one of the important variables, trade policy indicator, the regression suggests that it has the expected effect on Ethiopian exports though statistically not significant as evidenced under TGDPRj and EFWj. A one point increase on foreign trade index of HFTPIj is associated with 76 percent decrease of Ethiopian exports to these countries. Likewise, a one point decrease of trade protection by partners under EFWj indicator would lead to 68 percent increase of Ethiopian exports. Moreover, a one point increase in trade to GDP ratio of trade partners lead to an increase of Ethiopia's export by 23 percent. One important point needs to be underlined is that foreign trade policy of partner countries are not such affecting Ethiopia's exports. In fact, HFTPIj trade policy indicator shows that partner countries trade policy is significantly affecting Ethiopian exports at 5 percent level of significance.

Pooled OLS regression results in general almost directed to the same conclusion as in random effect regression results explained above except few differences in magnitude of coefficients.

Table 14: Regression Results of the Sample Period 1995-2003 Using Random Effect Model

Variables	Coefficients of Regressors		
	Using HFTPIj	Using TGDPRj	Using EFWj
Constant	-106.85 (25.66)*	-113.20 (25.61)*	-100.14 (27.19)*
Distance (Dij)	-1.74 (0.69)**	-1.70 (0.70)**	-1.63 (0.71)**
GDP of Ethiopia(Yi)	5.03 (1.12)*	5.14 (1.12)*	4.64 (1.19)*
GDP of Partners (Yj)	0.91 (0.16)*	0.98 (0.17)*	0.88 (0.17)*
Index of Foreign Trade Policy	-0.76 (0.39)**	0.23 (0.19)	0.68 (0.53)
Dummy for COMESA	0.10 (1.13)	0.01 (1.15)	0.08 (1.18)
R-Squared	0.59	0.56	0.55
Total number of Observations	279	279	279

Note: Standard Errors are in parentheses; *- 1% significance level, ** - 5 % significance level.

Table 15: Regression Results of the Sample Period 1995-2003 Using Pooled OLS Model

Variables	Coefficients of Regressors		
	Using HFTPIj	Using TGDPRj	Using EFWj
Constant	-103.26 (32.19)*	-113.20 (32.54)*	-91.02 (33.86)*
Distance (Dij)	-2.15 (0.33)*	-2.19 (0.34)*	-1.99 (0.33)*
GDP of Ethiopia(Yi)	4.85 (1.42)*	4.98 (1.44)*	4.16 (1.50)*
GDP of Partners (Yj)	1.08 (0.08)*	1.24 (0.10)*	1.02 (0.08)*
Index of Foreign Trade Policy	-1.12 (0.26)*	0.55 (0.60)*	1.14 (0.46)*
Dummy for COMESA	0.17 (0.52)	0.15 (0.53)	-0.09 (0.53)
R-Squared	0.42	0.40	0.39
Total number of Observations	279	279	279

Note: Standard Errors are in parentheses; *- 1% significance level, ** - 5 % significance level.

5.2. Basic Results of Sample Period 2000-2003

Using the sample period 2000-2003 data, the regression results show that the variables are in general with expected signs except dummy for COMESA. R- Squared is also moderate. However, significance of income of Ethiopia (Yi) as compared to the sample period 1995-2003 has decreased. In this case also random effect is tested to be appropriate model to estimate the equation.

According to estimates of random effect model, Ethiopia will export 148 % (HFTPIj), 147 % (TGDPRj) and 146 % (EFWj) less to the market due to physical barrier to trade. The coefficient of distance (Dij) under the three trade policy indicators are almost the same. But these coefficients are less (in absolute terms) than the coefficients we obtained using the sample period 1995-2003. The difference can be explained as Ethiopian exports to her trading partners increasing regardless of the physical distance of these countries from Addis Ababa. A ten percent increase of GDP of Ethiopia would lead to 10 % (HFTPIj), 10.2 % (TGDPRj) and 10.2% (EFWj) increase of exports. This result is smaller than the result we obtained using the sample period 1995-2003. The justification lays on the fact that mean of Yi for the sample period 1995-2003 is $ 6.17e+10 while the sample period 2000-2003 is $ 6.44e+09. Moreover, exports to sampled countries on average are $1.10e+07 and $ 1.02e+07, respectively.

A ten percent increase of GDP of trading partners of Ethiopia would lead to 70 percent increase of exports under the three alternative trade policy indicators. This result is smaller than the result we obtained under the sample period 1995-2003. I n fact, as evidenced by the result, it is significant at 1 percent level of significance.

Trade policy estimates of HFTPIj show that a point increase of trade barriers by trade partners would result in 7 percent decrease of Ethiopia's exports. Moreover, EFWj estimates show that a point decrease in trade barriers by trade partners would lead to 18 percent increase of Ethiopian exports. A one point increase of trade to GDP ratio by trade partners would result in a one percent increase of Ethiopia's export. However, the three alternative trade policy indicators are statistically insignificant. Assessing the impact of trade policy of partner countries on Ethiopian exports as compared to the sample period 1995-2003, one may observe that the coefficients of trade policy indexes we obtained under the sample period 1995-2003 is greater than the result we obtained under the sample period 2000-2003. This difference can be explained by partner countries' improvement of trade policy as evidenced in the means under the sample periods.

Surprisingly, the regression suggests that the 'COMESA dummy' variable has the opposite effect on Ethiopian exports from what we would expect: the more similar the economies of the countries are, the more intensive trade among these countries will be. Moreover, statistically the coefficients are insignificant. Therefore, the results indicate that Ethiopia's integration into COMESA is weak. In other words, Ethiopia's integration into COMESA is being aborted.

In a nutshell, empirical results show that without taking the special and differential provisions of the WTO into account, trade policies of partner countries are not significantly affecting Ethiopia's exports. This is further explained by decrease of significance of trade policies of partner countries in the sample period 2000-2003.

Table 16: Regression Results of the Sample Period 2000-2003 Using Random Model

Variables	Coefficients of Regressors		
	Using HFTPIj	Using TGDPRj	Using EFWj
Constant	-13.22 (41.01)	-13.81 (40.87)	-14.13 (40.75)
Distance (Dij)	-1.48 (0.68)**	-1.47 (0.69)**	-1.46 (0.68)**
GDP of Ethiopia(Yi)	1.00 (1.80)	1.02 (1.81)	1.02 (1.79)
GDP of Partners (Yj)	0.70 (0.15)*	0.70 (0.18)*	0.69 (0.15)*
Index of Foreign Trade Policy	-0.07 (0.45)	0.01 (0.35)	0.18 (1.17)
Dummy for COMESA	-0.98 (1.14)	-1.00 (1.16)	-0.97 (1.15)
R-Squared	0..53	0.52	0.52
Total number of Observations	124	124	124

Note: Standard Errors are in parentheses; *- 1% significance level, ** - 5 % significance level.

Table 17: Regression Results of the Sample Period 2000-2003 Using Pooled OLS Model

Variables	Coefficients of Regressors		
	Using HFTPIj	Using TGDPRj	Using EFWj
Constant	-8.65 (70.57)	-10.83 (70.43)	-12.31 (70.97)
Distance (Dij)	-1.92 (0.38)*	-2.00 (0.39)*	-1.84 (0.38)*
GDP of Ethiopia(Yi)	0.78 (3.12)	0.72 (3.12)	0.88 (3.12)
GDP of Partners (Yj)	0.89 (0.09)*	0.97 (0.11)*	0.88 (0.09)*
Index of Foreign Trade Policy	-0.39 (0.32)	0.28 (0.21)	0.13 (0.84)
Dummy for COMESA	-0.93 (0.61)	-0.84 (0.63)	-1.03 (0.63)
R-Squared	0.45	0.45	0.44
Total number of Observations	124	124	124

Note: Standard Errors are in parentheses; *- 1% significance level, ** - 5 % significance level.

5.3. Diagnostic Analysis of Empirical Results

An important issue needs to be addressed is whether the estimation results were being driven by outliers or not. That is, robustness of the estimates needs to be addressed. The

covariance matrix of coefficients of both random effect and pooled regression models under alternative trade policy equations suggest that there is heteroscedastcity. Robust standard errors estimations are used to correct for the presence of heteroscedascity. However, the result obtained indicates that there is no fundamental change in the significance level of the variables. Moreover, the results obtained dropping one country after the other under alternative trade policies indicates that the result reported above are not driven by outliers.

Correlation matrix under alternative trade policy and periods shows that correlations among explanatory variables are less than fifty percent. These results suggest that there is no multicollinearity problem[205]. In order to analyze whether the results are period-specific or not, the researcher extended the sample period by one year for the two sample periods, that is, (1995-2004) and (2000-2004). Moreover, more countries are included in the sample to analyze whether the results are cross section specific or not. A limitation with this analysis is lack of data on the three alternative trade policies. Heritage foundation index is the only trade policy index for which data is available for 2004. Therefore, including all countries of Ethiopian commodity importers, which have complete data on all variables, helps to analyze the effect. Accordingly, thirty five and fifty two countries are considered for the sample period 2000-2004 and 1995-2004, respectively. The results suggest that there is no fundamental change both on the level of significance and coefficient of explanatory variables. Therefore, the results reported in this paper are not both period and export destination (country) specific.

[205] Gujurati D. 3rd ed. (1995) pp.335-339

CHAPTER SIX

6. Conclusions and Recommendations

6.1. Conclusions

Accession to the WTO has an important impact on Ethiopia. It implies the adoption of WTO disciplines (as briefly assessed in chapter two), and this poses a number of challenges. First, accession will impose not only certain disciplines and rules but it will require the establishment of those institutions and policies that are critical for the enforcement of those disciplines. It also affects government budgets since border measures constitute an element of government policies towards budgetary revenues. Third, accession will also lead to various adjustment costs, and these can be divided into two groups-the government (public) financial costs of implementing the WTO disciplines and private costs of market adjustments due to changes in relative prices. Fourth, accession will also affect the conduct of macroeconomic policy. Finally, accession will affect the access of foreigners into Ethiopian markets, and Ethiopia's access to foreign markets.

The aim of this paper is to question the importance of the factor of improved market access after Ethiopia's accession to the WTO. I employed the gravity model of international trade to this end. Empirical results show that without taking the special and differential provisions of the WTO for LDCs including Ethiopia into account, trade barriers imposed by Ethiopia's trade partners do not play an important role in determining the volume of Ethiopia's exports.

Moreover, Ethiopia's effective utilization of preferences offered by developed countries, as assessed in chapter three, is not satisfactory. All these suggest that the Most Favored

Nation mechanism and improved market access might not be important aspects of Ethiopia's membership in WTO. Therefore, hasty marriage with WTO would have little significance for Ethiopian export market access. This finding is coincided with the Diagnostic Trade Integration Study by WB, which argues that: "...there would not be an immediate benefit except to signal to international community that Ethiopia's trade regime is bound to the international rules of the game."[206]

The cost of acceding to the WTO as well as the cost of actively participating in the organization once countries have become members should not be underestimated. The transition from GATT 1947 to the WTO Agreement, the range of issues covered by multilateral trade rules has expanded substantially (e.g. GATS, TRIP and TRIM). Most of these new issues are of little relevance to improved export market access for Ethiopia, while the implementation of the new rules, as evidenced in other countries, involves a large administrative, institutional reform and budgetary burden to her. Demands for minimum standards and labor and environmental protection could burden Ethiopia with short term adjustment costs and perhaps even losses in net export revenues and may further aggravate the country's balance of payments deficit. The later could arise not only because of declining exports but also because more expensive imported capital goods may be needed to meet environment standards.

[206] WB (2003) P.7

6.2. Recommendations

The scope of global trade agreements has extended into areas (such as services and intellectual property rights) that until the creation of the WTO were in the domestic domain, while at the same time enhancing existing disciplines to make them more intrusive. These new features together – extension into new areas, more intrusiveness into domestic policy making and the single undertaking- extended the WTO's influence over domestic policy making areas critical to the development process. The agreements under the WTO regime commit members not just to trade liberalization in goods sector, but also to specific policy choices on services, investment and intellectual property rights. Trade sanctions were seen as a way of enforcing property rights. Thus, the international trade regime is starting to have a direct effect on nation regulation and legislation, through rules and agreements that seek to harmonize different norms and standards of governance.

However, economic growth experience of industrialized countries demonstrates that liberalization was gradual and selective and came later after the take off period and after the domestic economy achieved some degree of competitiveness, at least in the domestic market, if not internationally. For this to be realized, autonomous domestic policy making is of paramount important.

Hence, it should be emphasized that long-enough should be given for the accession process. This is so because the WTO rules are not only about trade per se. The WTO regime is so intrusive that there is literally no domestic policy area that it does not intervene. Its influence is felt in every policy making area critical for the socio-economic development process. Moreover, membership demands all obligations to be taken as a

'single under taking', as a package rather than selectively in pieces. This, therefore, necessitates detailed studies of its content and possible impact on the economy over the coming years. Longer period also allows Ethiopia's industrial policy to take firm root. This can be accomplished through designing appropriate policies aimed at producing diversified and competent products, and working hard towards its implementation. Making necessary institutional changes is another important policy area to be underscored. Therefore, relatively better benefits would arise through buying time to launch and proceed with the restructuring process of the economy so as to enable it acquire, at least a better shock absorptive capacity, if not a strong competitive status.

Ethiopia should also demand the maximum period which could be allowed for the transition period. As noted above, little (if any) would be gained in the short run. It is the long run benefit that matters most. The transition period will also give it a breathing space to promote its industries with relatively less pressure from the WTO. Therefore, Ethiopia should take all the time it could to put its industries in-order, that is, with greater shock resistance, more productive and competitive, before the elapse of the transition period. In other words, she has to request for maximum transition period possible, carefully study and exploit fully all the provisions available for LDCs. Hence, the country must specifically make sure that it is in a position to exploit the opportunities rather than pay undue price by joining earlier and unprepared.

It should also be underlined that Ethiopia needs to improve her utilization of existing preferential market accesses as well as to exploit the opportunities of all preferential market accesses for LDCs. This can be accomplished by designing appropriate policies aimed at strategic approach to solve supply side problems of the countries.

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Appendices and Annexes

Appendix 1: Estimation Result of Pooled OLS using HFTPIj from 1995-2003

Number of obs = 279 F(5, 273) = 38.99 Prob > F = 0.0000
R-squared = 0.4166 Adj R-squared = 0.4059

lnxij	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
lndij	-2.146657	0.3296862	-6.51	0.000	-2.795708	-1.497607
lnyj	1.077729	0.083071	12.97	0.000	.9141874	1.24127
lnyi	4.845555	1.423993	3.40	0.001	2.042153	7.648958
lnhftpij	-1.123311	0.2573666	-4.36	0.000	-1.629987	-.616636
comesadum	.1734559	0.5230651	0.33	0.740	-.8562979	1.20321
_cons	-103.2616	32.19439	-3.21	0.001	-166.6425	-39.88079

Appendix 2: Estimation Result of Random Effect Model using HFTPIj from 1995-2003

Random-effects GLS regression Number of obs = 279
Group variable (i): country Number of groups = 31
R-sq: = 0.5923

lnxij	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
lndij	-1.736499	0.685117	-2.53	0.011	-3.079304	-.3936944
lnyj	0.9119689	0.1593551	5.72	0.000	.5996387	1.224299
lnyi	5.02622	1.115249	4.51	0.000	2.840373	7.212068
lnhftpij	-0.7575046	0.3903999	-1.94	0.052	-1.522674	.007665
comesadum	0.101175	1.130112	0.09	0.929	-2.113804	2.316154
_cons	-106.8512	25.65677	-4.16	0.000	-157.1375	-56.56481

Appendix 3: Breusch and Pagan Lagrangian Multiplier Test for Random Effects (1995-2003) Using HFTPIj

lnxij[country,t] = Xb + u[country] + e[country,t]

Estimated results:

	Var	sd = sqrt(Var)
lnxij	4.224371	2.055327
e	1.506449	1.227375
u	1.135134	1.065427

Test: Var(u) = 0
chi2(1) = 158.74
Prob > chi2 = 0.0000

Appendix 4: Estimation Result of Pooled OLS using TGDPRj from 1995-2003

Number of obs = 279 F (5, 273) = 36.76 Prob > F = 0.0000
R-squared = 0.4023 Adj R-squared = 0.3914

lnxij	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
lndij	-2.192783	0.3406308	-6.44	0.000	-2.86338	-1.522186
lnyj	1.239127	0.1019191	12.16	0.000	1.03848	1.439775
lnyi	4.984746	1.440518	3.46	0.001	2.14881	7.820682
lntgdprj	0.5544109	0.1595653	3.47	0.001	0.2402761	.8685457
comesadum	0.1518732	0.5315153	0.29	0.775	-0.8945166	1.198263
_cons	-113.6307	32.54181	-3.49	0.001	-177.6954	-49.56586

Appendix 5: Estimation Result of Random Effect Model Using TGDPRj from 1995-2003

Random-effects GLS regression Number of obs = 279
Group variable (i): country Number of groups = 31
R-sq: = 0.5823

lnxij	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
lndij	-1.695604	0.6961097	-2.44	0.015	-3.059954	-.3312542
lnyj	0.9750134	0.1710909	5.70	0.000	.6396814	1.310345
lnyi	5.143101	1.115959	4.61	0.000	2.955861	7.330342
lntgdprj	0.2347592	0.1869464	1.26	0.209	-.131649	.6011674
comesadum	0.0049075	1.145411	0.00	0.997	-2.240057	2.249872
_cons	-113.1958	25.61323	-4.42	0.000	-163.3968	-62.99478

Appendix 6: Breusch and Pagan Lagrangian Multiplier Test for Random Effects (1995-2003) Using TGDPRj

lnxij[country,t] = Xb + u[country] + e[country,t]

Estimated results:

	Var	sd = sqrt(Var)
lnxij	4.224371	2.055327
e	1.510909	1.22919
u	1.170022	1.081676

Test: Var(u) = 0
chi2(1) = 164.83
Prob > chi2 = 0.0000

Appendix 7: Estimation Result of Pooled OLS using EFWj from 1995-2003

Number of obs = 279 F(5, 273) = 34.87 Prob > F = 0.0000
R-squared = 0.389 Adj R-squared = 0.3785

lnxij	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
lndij	-1.990271	0.3345228	-5.95	0.000	-2.648844	-1.331699
lnyj	1.021379	0.0846168	12.07	0.000	.8547946	1.187963
lnyi	4.162912	1.502363	2.77	0.006	1.205222	7.120602
lnefwj	1.136396	0.4572005	2.49	0.014	.236309	2.036483
comesadum	-0.0908838	0.5298727	-0.17	0.864	-1.13404	.9522721
_cons	-91.02214	33.86181	-2.69	0.008	-157.6856	-24.35867

Appendix 8: Estimation Result of Random Effect Model using EFWj from 1995-2003

Random-effects GLS regression Number of obs = 279
Group variable (i): country Number of groups = 31
R-sq : = 0.5723

lnxij	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
lndij	-1.626817	0.7148827	-2.28	0.023	-3.027961	-.2256727
lnyj	0.8778165	0.1657048	5.30	0.000	.5530412	1.202592
lnyi	4.635999	1.190778	3.89	0.000	2.302117	6.969881
lnefwj	0.678188	0.5289439	1.28	0.200	-.3585231	1.714899
comesadum	-0.0837991	1.180904	-0.07	0.943	-2.398328	2.23073
_cons	-100.1434	27.19195	-3.68	0.000	-153.4387	-46.84817

Appendix 9: Breusch and Pagan Lagrangian Multiplier Test for Random Effects (1995-2003) Using EFWj

lnxij[country,t] = Xb + u[country] + e[country,t]

Estimated results:

	Var	sd = sqrt(Var)
lnxij	4.224372	2.055328
e	1.508551	1.228231
u	1.276449	1.1298

Test: Var(u) = 0
chi2(1) = 185.32
Prob > chi2 = 0.0000

Appendix 10: Estimation Result of Pooled OLS Using EFWj from 2000-2003

Panel variable: country, 1 to 31 Time variable: year, 2000 to 2003
Number of obs= 124
F (5, 118) = 18.70 Prob > F = 0.0000
R-squared = 0.4420 Adj R-squared = 0.4184

lnxij	Coef.	Std. Err.	t	P>t	[95% Conf.Interval]	
lndij	-1.83868	0.3752377	-4.90	0.000	-2.581753	-1.095608
lnyj	0.8783808	0.0925142	9.49	0.000	.6951775	1.061584
lnyi	0.876244	3.140067	0.28	0.781	-5.341944	7.094432
lnefwj	0.1328964	0.8381981	0.16	0.874	-1.526964	1.792757
comesadu	-1.030745	0.6268803	-1.64	0.103	-2.272139	.2106488
_cons	-12.30808	70.96691	-0.17	0.863	-152.8419	128.2257

Appendix 11:Estimation Result of Random Effect Model Using EFWj from 2000-2003

Random-effects GLS regression Number of obs = 124
Group variable (i): country Number of groups = 31
R-square = 0.5244

lnxij	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
lndij	-1.46108	0.6786279	-2.15	0.031	-2.791166	-.1309932
lnyj	0.6937978	0.1527352	4.54	0.000	.3944424	.9931532
lnyi	1.024317	1.79117	0.57	0.567	-2.486312	4.534946
lnefwj	0.1784047	1.170814	0.15	0.879	-2.116349	2.473159
Comesadum	-0.9739204	1.15447	-0.84	0.399	-3.236639	1.288798
_cons	-14.12769	40.75084	-0.35	0.729	-93.99788	65.7425

Appendix Breusch and Pagan Lagrangian Multiplier Test for Random Effects (2000-2003)

lnxij[country,t] = Xb + u[country] + e[country,t]

Estimated results:

	Var	sd = sqrt(Var)
lnxij	2.655333	1.629519
e	0.4831495	0.6950896
u	1.176546	1.084687

Test: Var(u) = 0
chi2(1) = 79.71
Prob > chi2 = 0.0000

Appendix 13: Estimation Result of Pooled OLS using HFTPIj from 2000-2003

Panel variable: country, 1 to 31 Time variable: year, 2000 to 2003
Number of obs = 124
F (5, 118) = 19.23 Prob > F = 0.0000
R-squared = 0.4490 Adj R-squared = 0.4256

lnxij	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
lndij	-1.923895	0.3786554	-5.08	0.000	-2.673735	-1.174054
lnyj	0.8922227	0.0926057	9.63	0.000	0.7088382	1.075607
lnyi	0.7583372	3.121927	0.24	0.808	-5.423929	6.940603
lnhftpij	-0.3882034	0.3153799	-1.23	0.221	-1.012741	.2363347
comesadum	-0.9277786	0.6134398	-1.51	0.133	-2.142556	.2869992
_cons	-8.648706	70.57065	-0.12	0.903	-148.3978	131.1004

Appendix 14: Estimation Result of Random Effect Model using HFTPIj from 2000-2003

Random-effects GLS regression Number of obs = 124
Group variable (i): country Number of groups = 31
Overall R- Squared = 0..5344

lnxij	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
lndij	-1.476245	0.6783156	-2.18	0.030	-2.805719	-.1467707
lnyj	0.6992198	0.1520662	4.60	0.000	.4011754	.9972641
lnyi	1.002797	1.800499	0.56	0.578	-2.526116	4.531711
lnhftpij	-0.0707783	0.4548798	-0.16	0.876	-.9623263	.8207698
comesadum	-0.9835701	1.135517	-0.87	0.386	-3.209143	1.242003
_cons	-13.22438	41.0077	-0.32	0.747	-93.59801	67.14924

Appedix 15: Breusch and Pagan Lagrangian Multiplier Test for Random Effects Using HFTPIj (2000-2003)

lnxij [country,t] = Xb + u[country] + e[country,t]
Breusch and Pagan Lagrangian multiplier test for random effects:

lnxij[country,t] = Xb + u[country] + e[country,t]

Estimated results:

	Var	sd = sqrt(Var)
lnxij	2.655333	1.629519
e	.4831716	.6951054
u	1.148668	1.071759

Test: Var(u) = 0
chi2(1) = 77.65
Prob > chi2 = 0.0000

Appendix 16: Estimation Result of Pooled OLS using TGDPRj From 2000-2003

Panel variable: country, 1 to 31
Time variable: year, 2000 to 2003 Number of obs = 124
F (5, 118) = 19.33
Prob > F = 0.0000 R-squared = 0.45 Adj R-squared = 0.4270

lnxij	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
lndij	-1.99307	0.3895249	-5.12	0.000	-2.764436	-1.221705
lnyj	0.9715065	0.1149504	8.45	0.000	.7438735	1.199139
lnyi	0.722279	3.118741	0.23	0.817	-5.453678	6.898235
lntgdprj	0.2790685	0.2075154	1.34	0.181	-.1318684	.6900054
comesadum	-0.8368161	0.6253198	-1.34	0.183	-2.07512	.4014872
_cons	-10.83218	70.43424	-0.15	0.878	-150.3111	128.6468

Appendix 17: Estimation Result of Random Effect Model using TGDPRj from 2000-2003

Random-effects GLS regression Number of obs = 124
Group variable (i): country Number of groups = 31
overall R-squared= 0.5213

lnxij	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
lndij	-1.46623	0.6884373	-2.13	0.033	-2.815543	-.116918
lnyj	0.7001436	0.1786995	3.92	0.000	0.349899	1.050388
lnyi	1.020419	1.80559	0.57	0.572	-2.518473	4.559311
lntgdprj	0.0050386	0.3482232	0.01	0.988	-0.6774663	.6875436
comesadum	-1.003224	1.156733	-0.87	0.386	-3.270378	1.263931
_cons	-13.81857	40.8662	-0.34	0.735	-93.91486	66.27771

Appendix 18: Breusch and Pagan Lagrangian Multiplier Test for Random Effects Using TGDPRJ (2000-2003)

lnxij[country,t] = Xb + u[country] + e[country,t]

Estimated results:

	Var	sd = sqrt(Var)
lnxij	2.655333	1.629519
e	0.483522	.6953575
u	1.141784	1.068543

Test: Var(u) = 0
chi2(1) = 77.01
Prob > chi2 = 0.0000

Annex 1: Effectiveness of Preference for LDCs as Measured by the Import Coverage, the Utilization Rate and the Utility rate, 1994-2001

Country	Year	Total Imports (a)	.Dutiable Imports (b) in Mil.	Imports Eligible for GSP Preferences (c) in Mil	Import Receiving GSP Preferences (d) in Mil.	Imports Covered By GSP Scheme (c)/(cb)	Utilization Rate ofGSP Scheme (d)/(c) in %	Utility Rate of GSP Scheme (d)/(a) in %
QUAD	1994	5347.0	3917.3	2071.0	999.0	52.9	48.2	18.7
	1995	6087.8	4706.1	2564.3	1361.2	54.5	53.1	22.4
	1996	9956.3	7451.1	2985.0	1517.9	40.1	50.9	15.2
	1997	10634.1	8163.4	5923.1	1788.2	72.6	30.2	16.8
	1998	9795.7	7915.1	5564.2	2704.5	70.3	48.6	27.6
	1999	10486.5	8950.4	5869.3	3487.5	65.6	59.4	33.3
	2000	13359.2	11715.5	7836.0	4990.2	66.9	63.7	37.4
	2001	12838.2	11167.1	7185.5	4919.9	64.3	68.5	38.3
Canada	1994	-	-	-	-	-	-	-
	1995	175.9	41.3	6.4	4.1	15.5	64.1	2.3
	1996	336.9	34.5	6.3	2.9	18.3	46.0	0.9
	1997	205.3	47.3	8.6	4.7	18.2	54.7	2.3
	1998	256.0	92.1	9.8	5.8	10.6	59.2	2.3
	1999	154.6	60.7	8.2	4.9	13.5	59.8	3.2
	2000	180.1	75.9	9.9	7.2	13.0	72.7	4.0
	2001	243.2	94.6	11.4	8.0	12.1	70.2	3.3
EU	1994	2471.2	1823.4	1791.7	748.1	98.3	41.8	30.3
	1995	2814.6	2277.8	2246.3	1077.6	98.6	48.0	38.3
	1996	3219.0	2580.3	2520.1	1196.8	97.7	47.5	37.2
	1997	3614.8	2926.3	2888.8	770.8	98.7	26.7	21.3
	1998	3519.4	2932.1	2908.0	761.8	99.2	26.2	21.6
	1999	3562.2	3100.9	3075.2	1035.0	99.2	33.7	29.1
	2000	4247.1	3671.7	3633.6	1499.5	99.0	41.3	35.3
	2001	4372.4	3956.1	3935.7	1847.4	99.4	46.9	42.3
Japan	1994	11205	695.5	211.2	200.5	30.4	94.9	17.9
	1995	1309.8	912.7	241.9	230.1	26.5	95.1	17.6
	1996	1504.3	939.8	388.9	269.9	41.4	69.4	17.9
	1997	1204.9	757.3	306.3	222.1	40.4	72.5	18.4
	1998	1045.4	643.8	364.0	189.9	56.5	52.2	18.2
	1999	989.0	679.6	366.2	231.9	53.9	63.3	23.4
	2000	1236.5	881.3	615.3	236.0	69.8	38.4	19.1
	2001	1001.3	398.1	278.3	228.4	69.9	82.1	22.8
USA	1994	1755.3	1398.4	68.1	50.4	4.9	74.0	2.9
	1995	1787.5	1474.3	69.7	49.4	4.7	70.9	2.8
	1996	4896.1	3896.5	69.7	48.3	1.8	69.3	1.0
	1997	5609.1	4432.5	27194	790.6	61.4	29.1	14.1
	1998	4974.9	4247.1	22824	1747.0	53.7	76.5	35.1
	1999	5780.7	5109.2	2419.7	2215.7	47.4	91.6	38.3
	2000	7695.5	7086.6	3577.2	3247.5	50.5	90.8	42.2
	2001	72213	6716.3	2960.1	2836.1	44.1	95.8	39.3

Source: UNTCAD (2004) 'The Least Developed Countries Report 2004- Linking International Trade with Poverty Reduction', P.251

Annex 2: Utilization of Cotonou Agreement by African Countries, 2002

Country	In'000' Total Import	In '000' MFN=0	MFN+ Cotonou Zero	% use of preferences	In % MFN=0	Cotonou Preferences
Nigeria	4989988	4689188	4988985	100	94	6
Ivory Coast	2600303	1652511	2470654	95	63.6	36.4
Angola	2264214	2194183	2264203	100	96.9	3.1
Cameroon	1562555	1263631	1422321	91	80.9	19.1
Congo (Dem. Rep.)	1232089	1228309	1231733	100	99.7	0.3
Ghana	1106461	665270	1103340	99.7	60.1	39.9
Liberia	872724	870522	872609	100	99.7	0.3
Kenya	845305	281319	834662	98.7	33.3	66.7
Equat. Guinea	738680	692593	738680	100	93.8	6.2
Zimbabwe	605677	147957	562705	92.9	24.4	75.4
Gabon	602526	515314	602456	100	85.5	14.5
Mozambique	582737	25265	573894	98.5	4.3	95.7
Madagascar	525793	120162	523513	99.6	22.9	77.1
Congo	501811	455465	490707	97.8	90.8	9.2
Guinea	475845	417784	475843	100	87.8	12.2
Namibia	447903	147293	386153	86.2	32.9	67.1
Tanzania	409639	197943	398197	97.2	48.3	51.7
Senegal	404990	81540	399211	98.6	20.1	79.9
Mauritania	371579	249718	371532	100	67.2	32.8
Botswana	313098	243572	276016	88.2	77.8	22.2
Sudan	262512	219853	243111	92.6	83.7	16.3
Uganda	259375	127682	259310	100	49.2	50.8
Ethiopia	183860	139661	175019	95.2	76	24
Malawi	176548	31580	151107	85.6	17.9	82.1
Central Africa	172183	171839	172183	100	99.8	0.2
Swaziland	127374	5459	39719	31.2	4.3	95.6
Zambia	99936	32726	84578	84.6	32.7	67.3
Sierra Leone	83048	54643	82930	99.9	65.8	34.1
Niger	78961	75548	78935	100	95.7	4.3
Togo	67974	43101	67923	99.9	63.4	36.6
Mali	65450	55334	65107	99.5	84.5	15.5
Benin	57688	32076	57476	99.6	55.6	44.4
Burkina Faso	52541	30974	48753	92.8	59.0	41
Chad	45499	40774	45499	100	89.6	10.4
Cape Verde	23945	11301	23940	100	47.2	52.8
Gambia	23651	6104	23521	99.5	25.8	74.2
Rwanda	21453	20119	21366	99.6	93.8	6.2
Comoros	18896	4179	18896	100	22.1	77.9
Burundi	18481	17829	18481	100	96.5	3.5
Lesotho	10255	6573	10255	100	64.1	35.9
Guinea Biss.	7523	3829	7523	100	50.9	49.1
S.Tome, Princ	6246	4634	6242	99.9	74.2	25.8
Eritrea	5110	2142	4521	88.5	41.9	58.1
Djibouti	4293	1991	4255	99.1	46.4	53.3
Somalia	2685	1153	2685	100	42.9	57.1
African ACP Total	23326717	17279488	22698061	98.	74.1	23.2

Source: UNECA (2004): 'Trade Preference and Africa- The State of Play and Issues at Stake' P. 51

Annex 3: Utility Rates of AGOA for Individual African Countries, 2002-2003

Country	Total Exports to US in $'000'		AGOA in GSP in $ '000'		% of imports under AGOA or GSP	
	2002	2003	2002	2003	2002	2003
Nigeria	5819603	10113618	5409660	9356012	93	92.5
Angola	3231266	4176429	0	0	0	0
South Africa	4235974	4887962	1342594	1668573	31.7	34.1
Gabon	1622021	1927715	1145627	1177458	70.6	61.1
Lesotho	321475	393056	318029	372674	98.9	94.8
Chad	5700	22434	0	14478	0	64.5
Kenya	189156	249137	129210	184441	68.3	74
Madagascar	215923	383329	79728	187879	36.9	49
Cameroon	172057	193319	115804	147011	67.3	76
Congo	223824	407186	106633	340790	47.6	83.7
Swaziland	114464	162033	81252	133975	71	82.7
Mauritius	280433	298096	114292	143077	40.8	48
Namibia	57353	123249	1717	46755	3	37.9
Cote d'Ivoire	381860	490248	49733	88037	13	18
Congo (DROC)	189692	173867	0	119471	0	68.7
Guinea-Bissau	35	1912	0	0	0	0
Botswana	29732	13642	4578	6324	15.4	46.4
Ethiopia	25659	30496	2320	2885	9	9.5
Uganda	15197	34883	32	1509	0.2	4.3
Tanzania	25343	24234	1293	1569	5.1	6.5
Cape Verde	1811	5640	51	2465	2.8	43.7
Mozambique	8160	8711	5916	7917	72.5	90.9
Zambia	7790	12469	83	510	1.1	4.1
Senegal	3799	4326	499	720	13.1	16.6
Sierra Leone	3833	6478	217	75	5.7	1.2
Mali	2583	2394	342	262	13.2	10.9
Guinea	71600	69226	68	194	0.1	0.3
Djibouti	1915	615	23	27	1.2	4.4
Niger	897	4034	22	63	2.5	1.6
Gambia	0	134	0	20	0	14.9
Benin	680	602	0	0	0	0
Rwanda	3086	2623	10	6	0.3	0.2
Seychelles	26291	15324	0	3	0	0
Sao Tome and Prin.	391	91	0	0	0	0
Mauritania	929	929	35	3	3.8	0.3
Total	17474282	24404120	8991502	14105025	51.5	57.8

Source: UNECA (2004): 'Trade Preference and Africa- The State of Play and Issues at Stake' P. 52

Annex 4: Costs of World Bank Projects Related to the Implementation of Three WTO Agreements

Area of Implementation	Country	Nature of Work	Cost ($m)
Customs Valuation	10 Eastern European Countries	7 years Institutional reform-Customs Modernization	108
	Tunisia	Customs reform component of a 5 years World Bank export development project	16
	Tanzania	3 years reform customs procedures	8-10
	Lebanon	Customs reform component of a 7 years. World Bank fiscal management Program	4
	Armenia	4 years World Bank project involving drafting new laws, training staff, computerizing Procedures	2
Sanitary and Phytosanitary Standard (all WB projects)	Russia	3 years SPS implementation-disease control and improvement of food processing facilities	150
	Algeria	2 Years locus control project	112
	Brazil	7 years livestock disease control project	108
	Argentina	5 years general agr.export reform project	83
	Poland	5 years SPS component of agr. exports development project	71
	Hungary	6 years Slaughter-house modernization project	41
Intellectual Property Right (all WB Projects)	Mexico	4 years project establishing agency to implement industrial property laws	32.1
	Indonesia	6 years project to improve IPR regulatory framework	15
	Brazil	5 years project to train staff administering IPR laws	4

Source: WTO Working Paper No. DERD-2002-02, P.57

Annex 5: Lists of Countries Included in the Sample for Empirical Analysis

Name of Country	Status in WTO
Australia	Member
Belgium	Member
Canada	Member
China	Member
Denmark	Member
Egypt	Member
Finland	Member
France	Member
Germany	Member
Greece	Member
Hong Kong	Member
Hungary	Member
India	Member
Israel	Member
Italy	Member
Japan	Member
Kenya	Member
Malaysia	Member
Netherlands	Member
Norway	Member
Pakistan	Member
Poland	Member
Romania	Member
Russia	Applicant
Singapore	Member
Spain	Member
Sweden	Member
Switzerland	Member
Thailand	Member
United Kingdom	Member
United States	Member

Declaration

I, the undersigned, declare that this thesis is my original work and has not been presented for a degree in any other university, and that all source of materials used for the thesis have been duly acknowledged.

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