

*TRADE LIBERALIZATION AND THE BALANCE OF PAYMENT:
EMPIRICAL EVIDENCE FROM ETHIOPIA*

BY

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**Trade Liberalization and the Balance of Payment:
Empirical Evidence from Ethiopia**

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I also owe special thanks to all those who contributed their invaluable support throughout this study, in particular my heart felt thanks to school of tomorrow staff members and my students, Aschenik Shitaye, Solomon Defapachew, Buzayew Pawulose, Abebe Hailu, and to all my family for their supports and moral encouragement.

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TABLE OF CONTENTS	PAGE
ACKNOWLEDGEMENT	i
TABLE OF CONTENTS	ii
LIST OF TABLES	iv
LIST OF ACRONYMS AND ABBREVIATIONS	v
ABSTRACT	vii
CHAPTER I	
1. Introduction	1
1.1 Statements of the Problem	2
1.2 Objectives of the Study	3
1.3 Methodology and Sources of Data	4
1.4 Hypothesis of the Study	4
1.5 Significance of the Study	5
1.6 Limitation of the Study	5
1.7 Organization of the Paper	6
CHAPTER II	
2. A Review of Literature	7
2.1. Introduction	7
2.2. Trade Liberalization and Economic growth	9
2.3. Balance of Payment adjustment theory	13
2.3.1 The Elasticity approach to balance of payments	14
2.3.2 The Absorption approach to balance of payments	15
2.3.3 The Monetary approach to balance of payments	17
2.4. Empirical review of Trade Liberalization and the balance of payments	19
2.5. Empirical review of exchange rate and trade balance	23
CHAPTER III	
3. Liberalization and Trade performance of Ethiopia	29
3.1. Introduction	29
3.2. An Over view of Trade Policy reform of Ethiopia	30
3.2.1. The Per-reform era	30

3.2.2. The Post- reform era	31
3.3. An Over view of Macroeconomics environment	34
3.3.1. Exchange Rate reform	35
3.4. The Structure of Ethiopian Exports and Imports	39
3.5. The Size and Sustainability of Current Account deficit	50
CHAPTER IV	
4. Empirical Frame work and results	52
4.1. Introduction	52
4.2. Empirical Modeling	53
4.2.1. Unit root testes	57
4.2.2. Co-integration tests	59
4.2.3. Long-run results	60
4.2.4. Short-run results	62
CHAPTER V	
5. Conclusion and Recommendations	65
5.1. Conclusion	65
5.2. Recommendations	69
References	72
Declaration sheet	79

3.2.2. The Post- reform era	31
3.3. An Over view of Macroeconomics environment	34
3.3.1. Exchange Rate reform	35
3.4. The Structure of Ethiopian Exports and Imports	39
3.5. The Size and Sustainability of Current Account deficit	50
CHAPTER IV	
4. Empirical Frame work and results	52
4.1. Introduction	52
4.2. Empirical Modeling	53
4.2.1. Unit root testes	57
4.2.2. Co-integration tests	59
4.2.3. Long-run results	60
4.2.4. Short-run results	62
CHAPTER V	
5. Conclusion and Recommendations	65
5.1. Conclusion	65
5.2. Recommendations	69
References	72
Declaration sheet	79

LIST OF TABLES

PAGE

Table 3.1: Distribution of tariff bands	33
Table 3.2: Official and parallel exchange rates	37
Table 3.3: Value of major export items before liberalization	41
Table 3.4: Value of major export items after liberalization	41
Table 3.5: Livestock population growth rate of the world, Africa and Ethiopia	43
Table 3.6: Value of major imports (in millions of Birr) before liberalization	44
Table 3.7: Value of major imports (in millions of Birr) after liberalization	45
Table 3.8: Total value of Exports, Imports, visible balance of Trade, Balance of trade as share of GDP and the balance of payments before liberalization	46
Table 3.9: Total value of Exports, Imports, visible balance of Trade, Balance of trade as share of GDP and the balance of payments after liberalization	47
Table 4.1: Unit root test for Regression Variables at level	58
Table 4.2: Unit root test for Regression Variables' first differences	58
Table 4.3: Long-run OLS Estimation results of Trade balance	60
Table 4.4: Long-run OLS Estimation Results of Current account balance	60
Table 4.5: Short-run OLS Estimation Results of Trade balance	62
Table 4.6: Short-run OLS Estimation Results Current Account balance	63

LIST OF ACRONYMS AND ABBREVIATIONS

A	Absorption
ADF	Augmented-Dickey-Fuller
BOP	Balance of Payment
C	Consumption expenditure
CA	Current Account
CIF	Cost Insurance Freight
CSA	Central Statistical Authority
COMESA	Common Market for Eastern and Southern Africa
DTIS	Diagnostic Trade Integration Study
ECA	Ethiopian Customs Authority
ECM	Error Correction Model
EEA	Ethiopian Economic Association
EEPA	Ethiopian Export Promotion Agency
EPRDF	Ethiopian People Revolutionary Democratic Front
FAO	Foreign Direct Investment
FOB	Free on Board
G	Government expenditure
GATT	General Agreement on Trade and Tariff
GDP	Gross Domestic Product
I	Investment
IMF	International Monetary Fund
M	Imports
ML	Maximum Likelihood
MOTI	Ministry Of Trade and Industry
NBE	National Bank of Ethiopia
OLS	Ordinary List Squares
PRGF	Poverty Reduction and Growth Facility
REER	Real Effective Exchange Rate
RER	Real Exchange Rate

RWGP	Real World Growth Product
S	Saving
SAP	Structural Adjustment Policy
SSA	Sub-Saharan Africa
TB	Trade Balance
TOT	Terms of Trade
UNCTAD	United Nations Commission for Trade and Development
WB	World Bank
WTO	World Trade Organization
X	Exports
Y	Domestic income

ABSTRACT

The effect of trade liberalization on the trade balance and current account of the balance of payments is controversial irrespective of the framework used for the analysis of balance of payments. In the partial equilibrium framework of the elasticity approach, the effect will depend on the extent to which export and import duties change and the price elasticity of exports and imports. In the general equilibrium framework of the absorption approach to the balance of payments, the effect of liberalization will depend on how real income is affected relative to real consumption expenditures. In the monetary approach to balance of payments, the liberalization could affect both demand and supply of real money balances.

The aim of this paper is to examine the empirical analysis of the balance of payments consequences of trade liberalization of Ethiopia. It focuses on the impact of trade liberalization on the trade and current account balances of the balance of payments. The main question addressed is whether there has been an improvement or deterioration in these accounts following trade reform. The data analyzed by estimating the time series econometric models using OLS and ECM frameworks to test the impacts of trade liberalization on trade balance and the current account of the balance of payments in the short-run and the long-run. It uses a regression model formulation, which includes domestic and world real income; real effective exchange rate and money so that the monetary, elasticity and absorption approaches to the balance of payments are also examined. The main findings are that trade liberalization has worsened the balance of trade and the current account balance deficit, because imports have increased more rapidly than exports. The results show also that real effective exchange rate does play a role in determining the long-run equilibrium behavior of the Ethiopian trade and the current account balance. The coefficient of domestic money supply variable is negative and statistically significant. This implies that domestic money supply has an effect on trade and current account balance.

CHAPTER I

1. INTRODUCTION

There is some consensus that the processes of trade liberalization are likely to result in the total elimination of tariff among the major economies of the world and most likely among developing countries. More recently, the objectives of multilateral negotiations have been expanded beyond liberalization of trade in goods solely, which was the main focus of the negotiations under the General Agreement on Tariff and Trade (GATT), to include a broader range of issues. These multilateral negotiations are being over shadowed by increased regionalism, which has served to accelerate rather than retard the liberalization process (Amelia U. and Santos.p, 2002).

In the last four decades, developing countries in general and African countries in particular have lunched from one development strategy to another: from industrialization to import substitution to export promotion, to structural adjustment programming (SAP). Recently, Sub-Saharan African (SSA) countries have increasingly embraced the latter approach, including the accompanying removal of trade restriction and currency devaluation (Nash, J. 1993).

Like many African countries, Ethiopia faced a serious economic problems from the mid 1970s through the entire decades of the 1980s. This chronic economic crisis manifested it self in various ways, such as low growth rate of gross domestic product, negative growth rate of per capita income, an increase in sustainable trade and balance of payments deficit and huge debt servicing.

Historically, the Imperial era was characterized by a political system land ownerships of aristocracy at the apex of whose power structure is the king. It was largely pursued a market based economic policy in which case the growth performance during that period, relatively, was satisfactory (Alemayehu, 2002).

During the Derg era there was a radical change in ideology and associated policies. The Ethiopian economy became one of the most regulated and inward-oriented countries in developing world. Economic structuring based on central planning and nationalization of private

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During the Derg era there was a radical change in ideology and associated policies. The Ethiopian economy became one of the most regulated and inward-oriented countries in developing world. Economic structuring based on central planning and nationalization of private

enterprises, exchange rate control and higher export and import duties which resulted to low per capita income, trade and balance of payment deficit.

The way out of these distortions is may be through a comprehensive economic reform such as trade liberalization which is to regain internal and external balance there by promoting sustainable growth and development in all sectors.

1.1 STATEMENTS OF THE PROBLEM

The liberalization of trade is strongly advocated as the means through which economies can accelerate their economic development. Developing countries have experienced extensive and rapid trade liberalization in recent years, undertaken both in the context of multilateral trade negotiation program agreed with the International Monetary Fund (IMF) and the World Bank (WB) (Wood.A.1997).

Following trade liberalization, Krueger (1978) suggests that there is evidence that imports respond more rapidly than exports causing temporary trade deficit. Khan and Zhaler's (1985) study for some Latin America countries suggests that external imbalances and inappropriate domestic policies played a significant role in undermining the trade liberalization attempts. The authors show that the elimination of trade barriers and capital control worsen current account deficit which can be reduced by appropriate policies.

During the derg regime of nearly two decades, the Ethiopian economy rapidly became one of the most regulated and inward oriented countries in the developing world. Economic restructuring based on central planning and the sweeping nationalization of virtually all medium and large scale enterprises so as to reduce the private participation in any economic activities and strengthen the state's role in external trade (Kidane A. 1999).

The present government responded to the dismal economic outcome of the Derg era by embarking on extensive economic liberalization process in 1992/93. The new development strategy includes: market liberalization; large devaluation; a reduction of public expenditure;

reduction of price control and subsidies; the size of the public sector is greatly reduced through wide-ranging privatization; and some steps towards trade liberalization such as reduce export restriction and import controls, considering tariff and non-tariff barrier and exchange rate distortions (Kidane A., 1994).

Theoretically, the effect of trade liberalization on the trade balance and the balance of payments a priori undetermined; therefore, it is entirely an empirical issue (Osty and Rose, 1992). In the partial equilibrium framework of the elasticity approach, the effect will depend on the extent to which export and import duties change and the price elasticity of exports and imports. In the general equilibrium framework of the absorption approach to the balance of payments, the effect of liberalization will depend on how real income is affected relative to real absorption. Finally, in the monetary approach to the balance of payments, the outcome of liberalization depends on how the real demand for money changes relative to real supply (Thirlwall A.P and Hussain.M.N.1982).

Given this theoretical controversial ideas, it is reasonable to ask questions whether trade liberalization improve or deteriorate the trade balance and the balance of payments and whether some approaches to liberalization are likely to succeed, and what role should the exchange rate and money stock play, and in particular whether there has been an improvement or deterioration in trade balance and the current account of the balance of payments as a result of trade liberalization of Ethiopia.

1.2 .OBJECTIVES OF THE STUDY

Liberalization does not mean free trade. It does, however, imply a substantial enough reducing in tariff and non-tariff barriers to establish a noticeably more open market, as compared with the pre liberalization era. The main objective of this study is to establish the impact of trade liberalization on the trade and current account balances of the balance of payments. The main question addressed is whether there has been an improvement or deterioration in these accounts as a result of trade liberalization of Ethiopia; in line with this objective, the study will attempt to:

- Examine the balance of payments consequences of trade liberalization of Ethiopia.

- Examine the role of domestic and world income growth, real exchange rates, reduction of tariff and domestic money supply in determining short-and-long-run trade and current account balance behavior for Ethiopia.
- Test the empirical relevance of the elasticity, absorption, and the monetary approaches for the current data of Ethiopia.
- Suggest the policy implications and the directions of future research for the sequences of liberalization to achieve a better balance between the growth of export and import in the liberalization processes.

1. 3. METHODOLOGY AND SOURCE OF DATA

In order to investigate precisely the impact of duty reductions and liberalization on the trade balance and the balance of payments, both as dependent variables, this study will use trade balance and the balance of payments as a share of real gross domestic product. The model is adopted from dynamic panel data models of trade liberalization and the balance of payments in selected developing countries which is basically derived from standard export and import demand functions in which the growth of exports and imports is a function of income and relative prices. The data will be analyzed by estimating the time series econometric models using OLS and ECM frame works to test the impacts of trade liberalization on trade balance and the current account of the balance of payments in the short-run and the long-run.

Data on macroeconomic variables, export and import duties, domestic and world real income, real effective exchange rate, and domestic money supply will be gathered from available sources in different ministries, journals, annul reports, quarterly and annul bulletins of National Bank of Ethiopia(NBE), discussion papers and other library materials.

1. 4. HYPOTHESIS OF THE STUDY

The issue of the impact of trade liberalization on the balance of trade and the balance of payments is an empirical one. Impact of trade liberalization, in Ethiopia, through tariff and non-tariff barriers may have the following:

- Liberalization may rises import growth than export growth in the short-run as a result trade balance and the current account balance worsen
- Trade liberalization increase the price and income elasticity of demand for import than export as a result devaluation may has only long-run effect
- Growth in domestic real income due to liberalization may worsen trade and the current deficit

1. 5. SIGNIFICANCE OF THE STUDY

There is no much work on the balance of payments consequences of trade liberalization in Ethiopia as liberalization is a recent phenomenon. The purpose of this study is to integrate balance of payments considerations into trade theory, and to motivate future research and policy-makers to think more carefully about the balance of payments implications of trade liberalization based on the current conditions of the Ethiopian economic performance.

Ethiopia face serious balance of payments problems which constraint her growth. The negative impact of trade liberalization on the trade balance and the current account balance of the balance of payment, identified in this paper thus has important policy implications for the sequencing of liberalization to achieve a better balance between the growth of exports and imports in the liberalization process.

1. 6. LIMITATION OF THE STUDY

My assumption, in developing countries like Ethiopia, the dependability of data is quite unsatisfactory. Accordingly, difficulty to get satisfactory data and measure of all achievement indicators, time constraint and financial limitations, the quality and quantity of data, and the willingness of the institutions to give relevant information are some of the limitations of this study. The main limitation of this study is the exclusion of capital account from the empirical analysis due to the fact that the capital accounts as share of real GDP stationary at level unlike other macroeconomic variables that are stationary at first difference (I_1). Hence it is not possible to analysis a time series variable unless they are at the same level.

1. 7. ORGANIZATION OF THE PÁPER

Section two of this study deals with a review of literature and some empirical analysis regarding the theory of trade liberalization, and devaluation and their impact on trade balance and balance of payment. It also presents the theory of balance of payment adjustment and some empirical studies.

Section three present trade policies and structure of trade in Ethiopia and aspect of macroeconomic environment and describe impacts of: trade policies, exchange rate, and tariff adjustment of Ethiopia.

Section four presents an empirical data and analysis of the impact of trade liberalization on trade balance and the current account balance of the balance of payments of Ethiopia. And use the finding to estimate the short and long run effect of liberalization on trade balance and the current account balance of the balance of payments. In section five the study provides conclusion and some tentative policy recommendation based on the result in section four.

CHAPTER II

2. A REVIEW OF LITERATURE

2. 1. INTRODUCTION

The classical and Neo-classical economists attached so much importance to international trade in country's economic growth and development. According to them, economic growth and development depends largely on division of labor and specialization, which related to the size of the market and domestic resource endowment. Hence, by allowing wider factor and product markets and making specialization and low cost production possible and creating a fair, competitive atmosphere and inter dependence among countries, improves incomes and standard of livings of the peoples in all country participating in international trade. Accordingly a country should specialize in production and export of those goods in which either its comparative advantage is greater or its comparative disadvantage is less, and it should import those goods in the production of which its comparative advantage is less or comparative disadvantage is greater. Thus, country would be able to increase its national income, which in turn increase the welfare's of the societies. In line with this, these economists together with other free trade theorists further suggest that since least developing countries are generally characterized by low level of technology, insufficient capital and narrow domestic market, they are the main beneficiaries of international trade, and should actively participate in international trade. Consequently, least developing countries are said to have a historically determined comparative advantage in primary production, and they are better continue to remain primary producing and exporting countries (Manner, 1983).

The opposite view holds that historically foreign trade has leads to international inequalities where by the rich countries have become richer at the expense of the poor countries. The comparative advantage in primary goods production and export was not the result of their natural strength, but it was artificially and deliberately created and imposed up on them by developed countries. They promote their own comparative advantage in industrial manufacturing by destroying industry and entrepreneur ship that existed in least developing countries which leads them low ranking of primary producer and cheap source of supplies to industrialized countries,

who then flooded the least developing countries market with their manufactured products. The pattern of comparative advantage between developed countries and least developing countries, in which the former enjoying high and growing prospects of both the demand and supply condition for industrial goods. They also have high-income elasticity of demand, increasing returns to scale in production and supply. In addition to this, industrial goods, having high modernization content offer unlimited scope for the application of science and technology, high level of education and skill. The latter, specializing in primary production and export suffer from low price and low income elasticity of demand, a limited production possibility being subjected to diminishing return to scale, offering limited scope for introducing new and modern technology, skilled manpower, and so on (Bayisa, 2001).

The radicalism and structural Economist State that such pattern of production and exchange based on comparative advantage has leads to unequal exchange and adverse terms of trade for least developing countries. These countries have virtually no export commodity for which there is stable or expanding world demand to offer stable terms of trade. Therefore, the deterioration in terms of trade resulting from declining export price and increasing cost of imports has leads most developing countries in to a chronic trade and balance of payment deficits (Turner, 1974).

Under what conditions can trade help least developing countries to achieve their development aspirations and improve their external imbalance? Both the classical labor cost and Neo-classical factor endowment theories of international trade are based on a number of explicit and implicit assumptions, which in many ways are contrary to the reality of contemporary international economic relations. Free trade, even if it has its own potential benefits, is exists mostly in the diagrams and models of economists, where as the real world is be set by all varieties of national protection and international non-competitive pricing policies. Any trade policy benefit depends upon the nature of the export sector, the distribution of its benefits and its linkages with the rest of the economy (Todaro, M.P., 1982). Thus, it has been established that openness does not mean advantages, because it is not openness that makes an economy grow but that growth tends to increase the volume of trade of a country. This is to say that countries must have something to sell before they open their economies in to undifferentiated and indiscriminate competition from abroad.

However, all trade theories ignore the monetary consequence of trade liberalization or the balance of payments consequences of the pattern of specialization trade for individual countries. The pre-assumptions of these trade theories is that the balance of payments of the country looks after itself so that as trade liberalization and reallocation of resource takes place there is no barrier in full utilization of domestic resources.

Sustainable development is a long-term process and as such needs to be examined with care. Development implies structural changes of many different types, ranging from purely economic aspects to those affecting the personal circumstances of people. Changes take time, all the more so when dealing with trade liberalization and structural change in the economic composition of output, as well as in the habits and norms that regulate consumption and saving patterns. Thus, developing countries like Ethiopia should deal with a long-term process, in which the evolution of the process itself and the initial conditions are of extreme importance. Here lies one of the advantages in tackling development from the point of view of a historian of economic persuasion. Although there may also be disadvantages, one certainly learns how to keep a close watch on the need to consider a long-run impact of trade liberalization, the role of initial conditions, and the implications of structural change, both in economic and social terms (Edwards, 1993).

Any consideration about the long-term sustainability of the impact of trade liberalization on trade balance and the balance of payments for developing countries including Ethiopia should be evaluated within these simple but often ignored perspectives.

2. 2. TRADE LIBERALIZATION AND ECONOMIC GROWTH: THEORITICAL AND EMPIRICAL EVIDANCE

Since 1950 there has been an attempt towards to international trade liberalization. Followed the general agreement on tariff and trade (GATT), established in 1947, and now under world trade organization (WTO) which replaced GATT in 1993. The tariff levels in developed countries have come down dramatically although there is still high protection against agricultural primary export items from developing countries. Tariff in low income countries have also been reduced although they still remain high compare to high income countries (Thirlwall.A.P, 1999).

The doctrine that trade liberalization promote growth and enhance welfare through increased specialization, efficient resource allocation according to comparative advantage, diffusion of international knowledge, and increase domestic competition as a result of international competition dating back to Adam Smith and his followers. Thus, the static gain from trade liberalization are measured by the output gains to be obtained by exporting to obtains the imports more cheaply in terms of output given up, compared to a country producing all goods itself.

The incense of dynamic gains from trade liberalization is that they shift outward the production possibility frontier if trade is associated with more investment and faster productivity growth based on scale economies, learning by doing and transfer of new knowledge from abroad, particularly through foreign direct investment. Modern trade theory focus on the dynamic benefit of gain from trade (Helpman and Krugman, 1985) and from an integral part of new endogenous growth theory of trade and which also contribute a vital in the causal change between export and growth (Grosman and Helpman, 1991).

Resent experiences show that countries that follow an open-economy, outward- oriented growth and development strategies have almost a good economic performance. The experience of East Asian Miracle prior to the global financial crisis of the late 1990s witnessed this export lead growth processes. Rapid growth in many Latin American countries in the late 1980s and 1990s also come about with domestic policy liberalization and open-economy models, which reduce tariff and non-tariff trade barriers. On the other hand, most African nations have persisted with inward-oriented, protectionist models and have done poorly. The negative consequences of many African countries highly interventionist and protectionist trade policy have become unraveled through the Uruguay round of General Agreement on Trade and Tariff (GATT) and World Trade Organization (WTO) deliberations to date (Weiss.J, 1992).

Trade liberalization, specifically the impact of openness on economic performance, has been widely studied. Some studies have tried to assess the credibility of trade liberalization attempts because of the lack of reliability of reforms, particularly in the case of some African countries in which the liberalization measures were reversed for various reasons. Although most developing

countries have made significant progress towards liberalization, the progress has been uneven and different.

One of the main reasons African countries began trade liberalization was the accessibility to external finance and the imposition of Structural Adjustment Programs (SAP) by World Bank (WB) and International Monetary Fund (IMF). The different experiences of trade liberalization policies vary from one country to another because of the different economic, social and political contexts, as well as the correlation with other types of reforms implemented (Nash, 1993). The reform packages typically included: import liberalization through tariff reduction or tariff structure unification, reduction of duty rates, and removal of non-tariff barriers mainly import licensing. Export liberalization consisted of the reduction of export duties and simplification of the administrative procedures for exporting. Payments liberalization was linked to the elimination of exchange rate controls. Prices and market regulations were also widely abolished. Additionally, there were short run reforms, undertaken mainly as a response to the effects of the second oil shock of 1979-80, and afterwards they were reversed. Some countries established more restrictions than in the pre-liberalization periods (Weiss.J, 1992).

Onafoura and Owoye (1998) indicate that trade policies, exports and investment rate shocks have a significant impact on economic growth in some Sub-Saharan African (SSA) countries. The results further suggest the need for African countries to embark on trade liberalization policies in order to enhance economic growth and an improvement in the balance of payments deficit. Also, Rodrik (1997) analyses the role of trade policy in achieving sustained long-term growth in SSA. According to the study, the effects of trade policy on economic growth seem to be indirect and more moderate.

On the other hand, there are fears that the new global economy might destabilize social equilibrium within countries as the social contract comes under threat from income distribution changes wrought by greater integration into the world economy. Indeed, one might argue that the emerging fault line in development dialogue is no longer state versus market, but between those who advocate rapid and deep liberalization to take advantage of globalization, and those who

advocate a more cautious policy stance which takes into account the distributional consequences of such liberalization.

For Africa including Ethiopia, the current global debates on liberalization may be challenging. The dominant consensus in the immediate post-independence period was one which decisively rejected a liberal trading regime. The debate, to the extent there was one, was settled in favor of a trade regime heavily biased against trade, and characterized by overvalued exchange rates and heavy use of trade policy instruments to favor import substitution. The intellectual underpinnings of this rested in the fear of integrating into a world economy without first developing an industrial base, and thus being at the mercy of global trends and fluctuations in primary Agricultural commodity prices. In the 1980s and 1990s, as the failure of development strategies became apparent, a new strategy, with trade liberalization as an important component, was tried and is still being tried. The countless evaluations of the last few years have produced predictably mixed verdicts. While there is a broad consensus on the devastating effects of overvalued exchange rates, there is disagreement on how far tariff reductions need to go, and on the wisdom of overly rapidly liberalizing the external capital account. The debate on external sector liberalization in Africa now finds itself facing the international debate on globalization. But the specificities of Africa should warn against wholesale translation of the global debate to the Africa context. Thus, just because there is resistance to globalization and liberalization in some developed countries, there is no automatic reason why Africa should follow suit. There has to be a separate and independent analysis for Africa, and indeed for different African countries World Bank (1998).

On the other hand if developing countries remains to protect industry and workers against imports by rising trade barriers. Societies typically pay a high price when they resort to protection. Protection raises the price of both imports and domestic products, which restricts consumer choice and places the heaviest burden on those in society who are least well off. It slows change and raises its cost, inflicts damage on exporting firms by making them less competitive, and almost invariably translates into greater long-term problems (Bayisa, 2001).

Agma(2001), uses a comprehensive data base to examine trade liberalization and economic growth for a group of 40 countries in Africa. The study conclude that during 1980-1999period, the more open countries in Africa experienced higher economic growth rates than those remain closed.

There are number of recent empirical studies that deal with the determinants of growth for developing countries. Roderik (1999) test the link between trade policy growths for a group of African countries in Sub-Saharan Africa are human resource physical infrastructure, macroeconomic stability and the rule of law. The effects of trade policy on economic growth appear to be indirect and modest. Another study examine whether enhanced trade volume in recent years improved efficiencies in South African economy. The study concluded that there is a significant positive relation between trade and total factor productivity growth over a time and across the sectors.

In developing countries like Ethiopia, trade liberalization policies are not easy to formulate and implement because the magnitude of the distribution impacts tends to be very large. Since there are aggregate gains to the economy from trade, at least in principle, it may be possible to compensate the losers and still leave some group better off.

2. 3. BALANCE OF PAYMENT ADJUSTMENT THEORY

Since the gold standard was abandoned in1931 as the supposedly automatic mechanism of balance of payments adjustment, three schools of theory have grown up corresponding to the three different ways of viewing balance of payment disequilibrium: as a problem of distorted relative prices of international trade/lack of competitiveness, as a problem of excessive expenditure relative to output/countries spent beyond their income, and as a consequence of internal monetary disequilibrium/a monetary phenomena. These three ways of viewing balance of payment difficulties corresponds to the so called elasticity, absorption, and monetary approaches to the balance of payments adjustment respectively (Johnson, H.G., 1967).

2.3.1. THE ELASTICITY APPROACH TO BALANCE OF PAYMENTS ADJUSTMENT

The elasticity approach to balance of payment adjustment focus on the current account of the balance of payments and rises the question that what conditions should prevail in the foreign exchange market for a devaluation/depreciation of the currency to improve the balance of payments based on partial equilibrium analysis holding all other variables constant that may affect the demand for and the supply of foreign currency. In particular, the supply elasticity of all goods assumed infinite so that domestic price of exports; and the foreign price of imports, and the price of export and import substitutes are constant, and autonomous expenditure in money terms is held constants that real expenditure is allowed to fall as devaluation takes place.

Marshal-Lerner condition states that, depreciation of exchange rate or devaluation of domestic currency will improve the balance of payments of a country and appreciation worsen it, if the sum of the elasticity of demand for country's export and its demand for imports is greater than one.

A further refinement of the elasticity approach is to incorporate income effects to the analysis. If autonomous money expenditure remains constant, allowing foreign income effects dose not change the Marshal-Lerner condition for a successful devaluation, but the magnitude of the balance of payments is might be changed (the change in the balance of payments is smaller than without).

A seemingly contrary result was derived by Harberger (1950), and is repeated by Stem (1973), which suggested that the income effect of devaluation change the Marshal-Lerner condition, making it more stringent. The explanation is that holding real expenditure constant implying a rise in autonomous expenditure in money terms, so that in the two- country model, money expenditure rises in devaluing country and falls in appreciation country (Thirlwall, 1997).

2.3.2. THE ABSORPTION APPROACH TO BALANCE OF PAYMENTS ADJUSTMENT

A different approach to the balance of payments emerged at the beginning of 1950s. Authors such as Harberger (1950), Meade (1951), and Alexander (1952, 1959) came to be part of a new body of analysis known as the absorption approach to the balance of payments (Krueger, 1983; Kenen, 1985). This approach shifted the focus of economic analysis to the balance of payments and solved some of the original criticisms of the elasticity approach. While the elasticity approach based its results on the effects of exchange rate changes on individual microeconomic behavior (Marshallian supply and demand analysis), this approach focuses its analysis mainly on economic aggregates, typical of Keynesian analysis. The core of this approach is the proposition that any improvement in the trade balance requires an increase of income over total domestic expenditures.

The theory of the trade balance under the current approach can be defined in terms of a basic macroeconomic identity which expresses the different links between the trade balance and the macroeconomic aggregates. Assuming no transfers or services; that is, the total national income becomes the gross domestic product and the current account the trade balance, one can write,

$$Y - A = TB = X - M$$

Where Y is the gross domestic product, A is domestic absorption, TB is the trade balance in domestic currency, and X and M are the value of exports and imports, respectively, in domestic currency. This identity simply says that the trade balance is just one side of the coin, the side on which the elasticity approach focused. The absorption approach analyses the other side. That is, what the absorption approach does is to analyze the economy from the point of view of aggregate expenditures, and especially to analyze the direct effects of exchange rate changes on relative prices, income, and absorption, and ultimately on the trade balance.

One can state what the nominal and real effects of devaluation are under the absorption approach as follow (only effects on the domestic economy are discussed). It is assumed that there exists a Keynesian short-run world. Devaluation reduces the relative prices of domestic goods in domestic currency. This reduction produces two direct effects. First, there is a substitution effect that causes a shift in the composition of demand from foreign goods towards domestic goods;

that is, the exchange rate change causes an expenditure-substituting effect so that domestic production increases. If there are ideal resources, income will increase depending on the degree to which the rest of the world absorbs more exports and the value of the income multiplier. Second, there is an income effect which would increase absorption, and then reduce the trade balance. The income effect is related to both the increase in domestic output (income), which acts through the marginal propensity to absorb (consume) and marginal propensity to invest, and the change in the terms of trade. The absorption approach argues that, in general, a country's devaluation causes deterioration in its terms of trade, and thus deterioration in its national income. The presumption is that devaluation will result in a decrease in the price of exports measured in foreign currency. Of course, the fact that terms of trade deteriorates does not necessarily imply that the trade balance is going to deteriorate. It can worsen the trade balance if the foreign currency price of exports sinks far enough relative to the price of imports to outweigh the trade balance improvement implied by the rise in export volumes and the drop in import volumes (Lindert and Kindleberger, 1982). In all, the final net effect of devaluation on the trade balance will depend on the combined substitution and income effects. As predicted by the absorption approach, the trade balance will improve, but it would be smaller because of the income effect on absorption than that predicted by the elasticity approach.

In general devaluation causes favorable as well as unfavorable effects on the national income of the countries. If devaluation causes unfavorable terms of trade, the national income of the country that devalued currency will fall and that of the out side world rise. It is known that devaluation increases the demand for domestic exports by lowering their prices in terms of foreign currency. It will leads to an increase in national income of the exporting country if the price elasticity for her exports greater than unity. Similarly, devaluation may cause a reduction in domestic imports by increasing their prices in terms of local currency (Agarwal, 1998). Alexander(1952) gave an important evaluation of this effect, focusing on the fact that a current account imbalance can be viewed as the difference between domestic output and domestic spending . Mathematically:

$$Y=C+I+G+X-M$$

Where Y is domestic output

C is domestic private consumption

I is gross domestic investment

G is government expenditure

X is domestic exports and M is imports

And defining domestic absorption as $A = C + I + G$ so that current account balance of the balance of payments is then: $B = Y - A$ or $B = S - I$. Within this framework, balance of payment policies can be evaluated in terms of whether they raise income (Y) relative to absorption (A), or saving (S) relative to investment (I). Policies to increase income are termed expenditure switching policies, and include, tariff non-tariff, export subsidies and devaluation and policies to reduce absorption is termed as expenditure reducing policies.

The absorption approach to balance of payments may be regarded as superior to the partial equilibrium elasticity approach, it may give the impression that it is plans to spend in excess of plans to produce that is causal in the explanation of balance of payments deficits, where as in practice this may not be the case. As we can see from mathematical equation above, which portray the balance of payments as the difference between income and expenditure, or saving and investment, are derived from the national identities. A deficit in the first instance may be caused by an autonomous fall in exports; by an autonomous rise in imports, or by an autonomous deterioration in the real terms of trade, quite independent of decision to spend more than output, because real income has been depressed. For the simultaneous achievement of macroeconomic objectives, the diagnosis of the true initial sources of deficit is important if the correct policy response is to be adopted (Johnson, H.G., 1977).

2.3.3. THE MONETARY APPROACH TO BALANCE OF PAYMENTS ADJUSTMENT

An alternate approach to the balance of payments has emerged since the end of 1950s. It is the modern monetary view to the balance of payments. This subsection presents the approach known as the monetary or global monetarist approach (Polak, 1957; Hahn, 1959; Pearce, 1961; Prais, 1961; Mundell, 1968, 1971). The core of this approach is the claim that the balance of payments is essentially a monetary phenomenon (Frenkel and Johnson, 1977). That is, under the monetary approach any excess demand for goods, services and assets, resulting in a deficit of the balance of payment, reflects an excess supply or demand of the stock of money. Accordingly, the balance of

payments behavior should be analyzed from the point of view of the supply and demand of money.

The basic essence of the monetary approach to the balance of payments is that it takes both current and capital accounts of the balance of payments and assumes that changes in international reserves are the function of disequilibrium between the demand for and the supply of money. An excess supply of money leads to a loss of international reserves and an excess demand for money leads to a surplus in international reserves; and changes in the level of reserves are the mechanism by which the balance between the supply and the demand for money is balanced each other. A currency depreciation may be successful if it increases the nominal demand for money relative to the supply, as the price level rises, or by reducing the real supply of money in relation to the real demand. Johnson (1977) asserted that all balance of payment disequilibria are monetary in essence.

According to Thirlwall T. and Santos-paulino A., (2004), the reason why the monetary approach to the balance of payments has died a slow death includes among others: the model assumes fixed exchange rates with changes in excess supply/demand for money affecting reserves, whereas since 1972 the world has been on floating rates under which the balance of payments is supposed to look after itself so that there is no need for reserves. The supply and demand for money determine the exchange rate not the balance of payment, and most of the assumptions on which the monetary approach is based which have come to be seen unrealistic in the changing and volatile conditions of the world economy in the last decades. Apart from the confusion between plans to spend and produce and actual spending and production, the limitations of the model are obvious when it is extended to many assets, disequilibrium in capital market or any other market as the source of disequilibrium, combined with ex ante equilibrium in the money market, but even if it were true that deficits could arise only if there was disequilibrium in the money market, the monetarist model must then assume full employment and stable demand for money. Another major weak assumption is that there is no sterilization of reserve movements by monetary authorities through open market operations so that the money supply always falls as reserves fall, and rises as reserves rise (Thirlwall T. and Santos-paulino A., 2004).

A further weakness of the conventional balance of payments adjustment analysis is the static nature of the theory. The balances of payments, and condition for improvement, are not explicitly considered in growth context, and yet what countries generally strive for is the computability of balance of payments equilibrium with a faster rate of economic growth.

2.4. EMPIRICAL REVIEW OF TRADE LIBERALIZATION AND THE BALANCE OF PAYMENTS

Trade liberalization may confer benefits on countries, but it may also impose costs, particularly in the short run, if liberalization leads to a faster growth of imports than export leading to unsustainable balance of payment deficits. There are monetary consequences of trade which are not considered by real trade theory. The consequence may be high that the real effect may be offset. This may be one reason why some studies no dissemble relation ship between trade liberalization and growth when domestic policies are protected Wood, A. (1997).

The effect of trade liberalization on trade balance and the balance of payments is mixed irrespective the framework used for the analysis of the balance of payments. In the elasticity approaches to the balance of payments, the effect of liberalization will depends up on the price elasticity of export and import. If the impact is measured in foreign currency, the export earning will increase if the price elasticity greater than one and import payments will increase if price elasticity less than one in absolute terms. In absorption approach to balance of payments, the effect of liberalization will be realized through real income changes. Even if real income increase, the balance of payments may not improve if the absorption propensity greater than one. If trade liberalization reduces prices, this will increase real absorption through a real balance effect and money illusion, but it could decrease absorption if there is a redistribution of income to traded good sector where the propensity to save is higher than that in non-traded sector. In monetary approach to balance of payments, the liberalization could affect both demand and supply of real money balance (Amelia.U and Santos.p, 2002).

A model of the trade balance and the balance of payments is estimated over the period 1980-2000 in Mexico, which considered trade balance and the balance of payments to be measured in

monetary terms, and the terms of trade also become an important variable to consider. The result shows that the mid-1980's trade liberalization worsened the trade balance. Since the deterioration of the trade balance limits the foreign exchange availability and the sustainability of economic growth, the study also evaluated how trade liberalization has interacted with the performance of Mexico's GDP growth through Thirlwall's (1979) balance of payments constrained growth model. The results of the model confirm the hypothesis that the slowdown in Mexico's economic growth since 1985/86 has resulted from an upward shift in the income elasticity of demand for imports and an insufficient increase in the rate of growth of exports. Thus, trade liberalization has resulted in making the balance of payments constraint on Mexico's long run growth even more.

Amelia U. (2002) try to investigate the effect of trade liberalization on the trade balance and the balance of payments, taking 22 developing countries from Africa, East Asia, South Asia and Latin America that have undertaken extensive trade policy reforms over the last three decades. Special attention has been paid to identifying the years when significant liberalization took place, and considerable attention has also been paid to the construction of time series for the duties applied to exports and imports over the period of analysis, which are also used as measures of liberalization. The various estimation techniques used have provided results that are strong and robust to the different specifications estimated.

The results may be summarized in such away that the effect of the pure trade liberalization has been to deteriorate the trade balance by over one percent of GDP on average, but the impact on the current account of the balance of payments has been less which increasing the average deficit by roughly 0.5 percent of GDP. The effects of the liberalization on the trade balance and balance of payments have not been the same across the regions of Africa, Latin America, East Asia, and South Asia. Africa appears to be more affected by the process of liberalization. Also, the trade balance and the current account balance have worsened following liberalization, on average, in all the regions analyzed. Furthermore, faster growth in the liberalized economies is associated with greater trade balance and current account deficits, as shown by the negative and significant interaction dummy, particularly in East Asia (Ashok P. and Corneliu S., 2004). With respect to the estimates that discriminate between countries according to the degree of protection, the impact of liberalization differs in relation to whether countries are highly protected, or already

have relatively low levels of protection. The negative effects on the trade balance and balance of payments are larger in the more highly protected countries.

According to him, the effects of trade liberalization on the balance of payments, basically in the trade account, have serious policy implications. Many countries face serious balance of payments problems originating, at least in part, from declining terms of trade, and this in turn leads to reduced income from their exports as well as increased costs for their imports. Moreover, the balance of payments crises suffered by a large number of developing countries have revealed the extent to which growth rates have come to depend on steadily rising export earnings and capital inflows and how disruptive an interruption to these sources of foreign exchange can be.

An important issue is whether or not the deficits can be sustained, and that depends on Macroeconomic policies mainly those that influence demand, developments in the real exchange rate and the inflows of foreign capital. The importance of the right policy sequence before and during liberalization is a matter of great debate, but there is no doubt that there is a need for implementing the appropriate exchange rate, fiscal and monetary policies during the liberalization process (Ashok P. and Corneliu S., 2004).

An assessment made by Suzette, H. (2003) on the elimination of tariffs expected to have a significant adverse impact on the Jamaican balance of payments. Imports appear to be sensitive to these adjustments. In the context of the current balance of payments deficit, future tariff adjustments are to be approached with caution because of their potential adverse impact on the external accounts and the broader macro economy in the short- term to medium-term. The study concluded that at least, a reasonable adjustment period should be negotiated, as this would minimize the adverse macroeconomic effects. In addition, policies aimed at encouraging the production of tradable goods and services at competitive prices are essential to ensuring a sustainable external position. This could involve efforts to enhance macroeconomic stability and reduce security costs in Jamaica. The private sector could also be assisted, through the organs of the state, to take advantage of new trade opportunities and market outlets. Innovation should be promoted through research development, as well as, the establishment of a regulatory framework that is favorable for globalization and trade liberalization. Importantly, effort must be made to

take advantage of the safeguard measures under the GATT, that allow developing countries to restrict imports, for temporary periods, in emergency situations, or in order to promote the development of new and/or infant industries.

Ashok P. and Corneliu S. (2004) encompassed three decades and about 42 developing countries dispersed over three geographical regions of Asia, Africa and Latin America. Their findings are on the relationship between liberalization and growth and liberalization, growth and trade balance or current account while other factors affecting these relationships are taken into consideration.

Accordingly, liberalization contributes significantly to economic growth, openness and investment rates over the period 1970-1999. Liberalization worsens trade deficits while it improves current account deficits when the entire period was considered. Economic growth in a domestic economy reduces current account deficits in the period 1980-89 while it has no significant relationship in earlier or latter decades. Trade deficits tend to rise with economic growth in Asian economies while there was no such evidence for either Latin American or African economies. In cross-section study, openness, investment rates, density of population and government consumption to GDP has strong positive effects on growth. Political and other national security variables do not show a great deal of importance in these cross-country regressions. Base year real GDP has a negative and significant coefficient suggesting that there is strong evidence of convergence in the sense that countries which have low per real income in the base year show faster growth when factors controlling for other variables are considered. Liberalization again has a significant positive relationship with economic growth (Ashok P. and Corneliu S. 2004).

For a country like Ethiopia, which has little market power, open trade policies are believed as one of an instrument available for the transformation to a modern economy. However, for a variety of reasons, discussed in next chapter of this study, Ethiopia has not fully realized the full benefits from its trade reforms that began in earnest in the early 1990s. It is equally true that the country is certainly better off under the liberalized trade regime compared to the highly restricted trade regime of the Derg period.

2.5. EMPIRICAL REVIEW OF EXCHANGE RATE AND TRADE BALANCE

Exchange rate is one of the important prices in an open economy since it affects some macroeconomic variables and policy decisions. Thus, it is not surprising to learn that the study of exchange rate has been one of the most important areas of economic research over the past few decades. This body of research has experienced tremendous growth, especially in the post-Breton Woods era in which foreign exchange rate has been highly volatile after the inception of the floating exchange rate regime in 1973.

There are heated debates in the economic and econometric literature on the impact of devaluation on trade balance. Several theories have been advanced in this regard to explain the effect of devaluation on the trade balance. The most common being the elasticity, monetary and absorption approaches. The elasticity approach proposed by Robinson (1947) and Metzler (1948) and popularized by Kreuger (1983) posits that transactions under contract completed at the time of devaluation or depreciation may dominate a short-term change in the trade balance. As pointed out by Upadhyaya and Dhakal (1997), such a devaluation of currency would cause the trade balance to deteriorate in the short run. Over time, export and import quantities adjust and this causes elasticity of exports and imports to increase and for quantities to adjust. This tends to reduce the foreign price of the devaluing country's exports and rise the price of imported good and which directly reduces the demand for imports. Consequently, the trade balance improves. Clearly, the effect of devaluation on trade balance depends on the elasticity of exports and imports. Williamson (1983) is critical of the elasticity approach arguing that the higher import prices, caused by devaluation, could stimulate increases in domestic prices of non-traded goods. The consequence is a rise in inflation and this could potentially reduce the benefits of devaluation as manifested in the increase in trade balance.

The monetarist approach to exchange rate determination (Mundell, 1971; Dornbusch 1973; Frenkel and Rodriquez, 1975) is based on the argument that devaluation reduces the real value of cash balances and/or changes the relative price of traded and non-traded goods, thus improving both the trade balance and the balance of payments (Mills, 1979). This implies that devaluation or depreciation decreases the real supply of money, resulting in an excess demand for money, the

effect being hoarding and an increase in trade balance. From the monetary perspective, the role of relative prices in the analysis of devaluation is of little importance in explaining the impact of devaluation on trade balance.

Proponents of the absorption approach, Mills (1979) notes, are due to Alexander (1952) and Johnson (1967), who argue that devaluation may change the terms of trade, increase production, switch expenditure from foreign to domestic goods, or have some other effect in reducing domestic absorption relative to production, and thus improving the trade balance.

Himarios (1989) cites the work of Laffer (1977) to emphasize the links in the chain postulated in the elasticity approach to be less likely to hold in reality. Himarios (1989) identifies the core of the debate to lie in the effectiveness of nominal devaluation in affecting the real exchange rate and the importance of real exchange rates in influencing trade flows.

In general the impact of devaluation on trade balance may summarize as follows: The elasticity approach focuses on the exchange rate as the major determinant of the trade balance. The monetary approach focuses on exchange rate by isolating relative money supplies, with excess demand for money and the desire to hoard cash lowering a trade balance. The absorption approach to trade balance stresses that an increase in real domestic income relative to foreign income would lower the trade balance due to the increased demand for imports.

Despite extensive research on the impact of exchange rate adjustment on an economy, empirical studies have not resolved the debate over the impact of devaluation on trade balance. Cooper (1971) studied the effect of 24 devaluation episodes in 19 developing countries over the period 1959-66. Cooper (1971) found that, overall, devaluation improved trade balance and balance of payments. Musila and Newark (2003) criticizes the results of Cooper on the grounds that the methodology used was unsound. That is, it is not possible to distinguish between the effects of devaluation and macroeconomic factors on trade balance. Kamin (1988) study of devaluation and macroeconomic performance found that devaluation does improve trade balance because it stimulates exports. Salant (1977) found that devaluation improves the balance of payments if not trade balance. Gylfason and Risager (1984) also reach similar conclusions that devaluation

improves trade balance. On the contrary, the studies of Laffer (1977) and Miles (1979) find that devaluation does not improve trade balance. Himarios (1985) criticized the work of Mills (1979) on the grounds that there are serious deficiencies in the methodology and tests used, and accounting for these deficiencies reverses the results.

The other studies conclude that devaluation worsens trade balance and balance of payments. In recent times, a number of studies have extended the works of earlier authors in this area by examining the impact of devaluation on trade balance in a time-series theoretic framework. Although a number of studies have investigated empirically the effects of devaluation on trade balance and to a lesser extent inflation, few studies have been conducted on some African countries.

The study by Rawlins and Praveen (2000) examined the impact of devaluation on trade balance of some selected African countries, including Ghana. Following the work of Kreuger (1983), Rawlins and Praveen specified and estimated an Almon Distributed lag process of trade balance using annual data. The model consists of monetary and fiscal policy variables. Rawlins and Praveen found that the real exchange rate depreciation did not improve Ghana's trade balance in the year of the devaluation. Rawlins and Praveen Conclude that the J-curve effect appears not to be significant in the case of Ghana.

There is scope for African countries to pursue the policy of devaluing the currency since it has very little impact on inflation and has the ability to redistribute income from importers to the government, assuming that exporter's prices are not adjusted in line with the devaluation. Younger concludes that, given that devaluation improves the government's fiscal position, there is scope to use such a policy instrument to reduce growth rate of the money supply, and hence inflation.

Michael B. (1999) investigate that the impact of devaluation on trade balance depends primarily on the degree of pricing to market. With price fixed in exporter currency, the effect of devaluation on trade balance depends only on the Marshal-Lerner condition, which must be satisfied in his model. When price set to consumer's price index, the impact of devaluation on the

trade balance depends on the inter-temporal elasticity of substitution. In this case devaluation may improve, deteriorate, or leave unchanged the trade balance depending on the size of elasticity.

An assessment made by IMF (2004) found that from the late 1940s through to the early 1990s the Ethiopian currency, the Birr remained rigidly pegged to the US dollar. During 1945-71 Birr/\$ rate remained unchanged at 2.5. It was revalued to 2.3 in December 1971 and then to 2.07 in February 1973 and remained at that level until October 1992. The natural outcome of this passive exchange rate policy was the development of an illicit parallel market for foreign exchange, where at times the spread between the two rates reached as high as 230 percent. The overvalued official exchange rates coupled with stringent foreign exchange rationing provided fertile ground for illicit cross border trade, particularly in coffee and live animals.

As part of the overall reform program of the new government, the exchange rate was adjusted from Birr/\$ 2.07 to 5.00 on 1 October 1992 (a 142% devaluation). Following the devaluation, the exchange rate was allowed to be determined according to demand and supply conditions in the foreign exchange market, with the National Bank of Ethiopia (NBE) intervening only to smooth out erratic fluctuations in the rate. By the end of 2002, the rate was around Birr/\$ 8.75. By the end of August 2003, the rate was Birr/ \$8.611. As of 16 July 2004, the rate was Birr/\$8.642. What obtains today can be broadly described as a managed float.

The NBE has taken a number of initiatives to improve the functioning of the foreign exchange market with a view to help keeping the exchange rate at realistic levels and to gradually harmonize the official and parallel foreign exchange markets. These included eliminating foreign exchange rationing, inaugurating a foreign exchange auction in May 1993 (on a fortnightly basis to begin with and on a weekly basis since September 1998), permitting commercial banks to open foreign exchange bureaus to engage in retail foreign exchange trading (October 1996), and permitting inter-bank foreign exchange trading (September 1998). Currently, the NBE is using the US dollar as the sole intervention currency, but has the option of pegging the Birr to other specially tailored basket of currencies.

One indicator of the success of the stabilization relates to the exchange rate. Following these reforms, the gap between marginal and parallel exchange rates (the black market exchange rate premium) has declined sharply. By 2002/2003, the black market premium was below 0.2 percent compared to 238 percent in 1991 (during the highest range in the black market rate). The floating exchange rate has been appropriately backed by a firm commitment to maintaining medium term macroeconomic stability. The fiscal deficit had been kept well within the limits (below 4 percent of GDP) agreed under structural adjustment programs, except during 1999-2001, when it increased to 11.2 percent of GDP because of war expenditures.

The foreign exchange reforms also included the lifting of restrictions on remittances by foreign nationals. Restrictions on the amount of foreign currency allowed for overseas medical and business expenses have been abolished. Foreign currency purchase of up to US\$1200 is now permitted per person for holiday travel. Exporters are allowed to retain up to 10% of their foreign exchange receipts in foreign currency deposits and sell the balance to any local bank or foreign exchange bureau at freely negotiated rates over an extended conversion period of four weeks (IMF, 2004).

According to Kidane (1999), during the crisis period (1974–1991) the Ethiopian government tried to contain the process not by following appropriate policies that could bring the disequilibrium and inconsistency back to sustainable equilibrium and internal consistency, but by imposing further exchange controls and higher export and import duties, as well as further nationalization at the expense of private incentives and the operation of market forces. These controls and impositions led to the emergence of parallel markets and further increase in budgetary deficit. Between 1974 and 1991, the ratio of the parallel to the official market exchange rate of the Ethiopian currency increased from 1.71 to 3.63. The expenditure– revenue ratio increased from 0.83 in the late 1950s to 1.34 in the late 1980s.

According to him, an attempt was made to model the monetary or price effects of devaluation on the price of tradable and non-tradable goods and the real exchange rate (RER). The results showed devaluation and the reduction in premium as the two most important variables explaining the variations on the relative prices of tradable, non-tradable and the RER in a predictable

manner. The effect of devaluation on real variables was also considered and the results showed that the effect of devaluation (as reflected in the variation of RER) on the supply and export of coffee seems to be positive and significant. The results suggest a substantial reduction in coffee smuggling and an increase in the export of coffee through official channels. Other short-run and long run responses to changes in RER were not considered because of the recentness of the reform and the nature of Ethiopia's major export commodity – coffee.

From above, it is clear that neither theoretical nor empirical studies have established definitely whether a devaluation of a country's domestic currency would improve its trade balance. Understanding of the long-run relationship between exchange rate devaluation and trade balance is important for policy formulation and implementation in developing countries, such as Ethiopia.

CHAPTER III

3. LIBERALIZATION AND TRADE PERFORMANCE OF ETHIOPIA

3.1. INTRODUCTION

The conventional theory of international trade measure the gains from trade from the supply side, with full of unrealistic assumptions, showing how specialization and trade can augment the supply of real resources through a more efficient allocation of resources on the one hand, and by stimulating capital accumulation and technical progress on the other. However it ignore the monetary or the balance of payments consequence of the pattern of specialization and trade liberalization for individual countries. Some countries incur balance of payment deficit as a consequence of specialization in a particular range of commodities, and the balance of payment cannot be improved by trade liberalization ((Ashok P.and Corneliu S. 2004).

A more radical view suggests that international trade in general, and trade between developed and developing countries in particular, is actually harmful to developing countries balance of payments and development prospects. General involvement in foreign trade liberalization, there fore, may exposes developing countries to adverse balance of payment deficit, economic, political and social out comes. The conclusion drown from such argument is that unplanned liberalization during the early phase of adjustment should not be entertained. Countries, even within the same region, should not put in the same basket. Liberalization of international trade may be good but the timing of liberalization and the commodity to be liberalized should depend upon many countries specific socio-economic and political variables (Bayisa, 2001).

In the last four decades, developing countries in general and African countries in particular have lunched from one development strategy to another: from industrialization to import substitution to export promotion, to structural adjustment programming. Recently, sub-Saharan African countries including Ethiopia have increasingly embraced the latter approach, including the accompanying reduction of trade restriction and currency devaluation (Nash, J. 1993). Hence it is

rational to access trade policy under different regime and describe the composition and performance of Ethiopian trade and external balance since liberalization.

3.2. AN OVER VIEW OF TRADE POLICY REFORM OF ETHIOPIA

Ethiopia is a typical under developed countries that need strong external and internal macroeconomic policies which can improve the balance of payments deficit and development aspects through strong export sector that could finance the importation of capital and other goods which can not be provided by domestic market. However, an examination of external trade policy of the three successive regimes in Ethiopia reveals that the country's external trade policy has moved from a free trade policy to a controlled trade policy regime and back to a free trade policy (Alemayehu, 1999).

3.2.1. THE PRE-REFORM ERA

The pre-reform trade regime in Ethiopia was characterized by one of protectionism, based on at first on and deriving from purely economic but latter expand to included ideological objectives. The economic reasoning behind the external trade policy of the Imperial regime was the classical free trade doctrine which aims at mobilizing government revenue by imposing taxes on export and imports, minting the balance of payment at a sustainable level as well as providing the domestic economy with the degree of protection deemed necessary. The Imperial regime took various measures to facilitate external trade such as the establishment of chambers of comers, and the establishment of various boards. These measures aimed at controlling the import quality and exports and facilitating external trade. Regarding import items, imports of capital goods and raw materials are free of duty while others taxed (Befekadu.D., and Berhanu,N., 1999).

The revolution of 1974 went beyond the simple change of ideological out look. During the derg regime of nearly two decades, the Ethiopian economy rapidly become one of the most regulated and inward oriented countries in developing world. Economic restructuring based on central planning and the sweeping nationalization of virtually all medium and large scale enterprises so

as to reduce the private participation in any economic activities and strengthen the state's role in external trade.

What change under the military regime were the purposes for which the instruments were used and severity with which it was applied. To the three objectives of Imperial regime a fourth objective was imposed the control and gradual extension of the private sector and most importantly the socialization of economic activities. To enhance the process of socialization, the administration and utilization of foreign exchange was withdrawn from national bank of Ethiopia (NBE) in favor of ministry of planning and the institution that preceded it. While the capital account remains tightly closed, as was the case under the Imperial regime, payments for the current transaction were drastically curtailed (Befekadu.D., and Berhanu,N., 1999).

Taxes on foreign trade were important sources of government revenue motivating high rates. Exchange control was used to maintain the balance of payments at a more sustainable level. The no-tariff barrier particularly the quota systems that included the complete banning of certain goods many have had the objectives of minimizing what the regime may have thought were "luxury" consumption as well as goods deemed to be harmful to societies, while at the same time casting a protective umbrella over domestic producers (Dercon, S., 2000).

3.2.2. THE POST- REFORM ERA

The decade of the 90's coincided with major revolution both in the world and in Ethiopia. The dissolution of the Soviet Union eliminated the bipolar global political arrangements in favor of one world political arrangement. The finalization of the Uruguay's round of Agreement produced a new set of regulations to govern international trade and institutionalized its management in world trade organization (WTO). At home the Ethiopian people Democratic Front (EPRDF) ousted the military socialist regime and inherited an economy, which has been exhausted by the appropriate policies and devastated by civil war.

Liberalizing the external trade regime has been one of the central and more visible elements of Ethiopia's drive to achieve accelerated economic growth and symbolic of its break with past

economic policies, which started with slow pace in the second half of 1991, and first half of 1992 gathered momentum toward the last quarter of 1992. The liberalization measures were initiated by the devaluation of Birr by 142% from Birr 2.07 of per US dollar to Birr 5.00 per us dollar which was soon followed by the streamlining administrative controls as well as the reduction in tariff and eliminating of export duties with the exception of that imposed on coffee (Kidane A. 1994). 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 drugs and firearms. Both tariff levels and their dispersion have been reduced significantly under tariff reforms (IMF, 2004).

As result of the reforms tariff rates narrowed down from pre-reform 0-240 percent to 0-80 percent in 1995 and then to 0-35 in 2002 .The average (un-weighted) 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 imports) declined from over 23 percent in mid-1990s to 12 percent by 2001/02(IMF, 2004).

According to information from Ethiopian Customs Authority (ECA), in 2003 the Government adopted a six-band tariff structure based on the Harmonized System. Both import and export tariffs are ad valorem. There are no other preferential tariffs except for imports from COMESA member countries. The six tariff rates range from 5% to 35% (i.e. five bands and zero per cent (see Table 3.1) below. The rates are 5, 10, 20, 30 and 35 per cent respectively. There are five prohibited items and hence a very insignificant number of tariff lines. They are Drug made from the juice of a certain poppy, ethyl alcohol and other similar spirits and worn clothing and textile articles or rags. These prohibitions are put in place for health reasons and for preventing illegal traders from importing contraband classified as used clothing and rags.

Table 3.1: Distribution of tariff bands

Tariff bands (Percent advalorem)	Number of Tariff lines	Share of Tariff	Average Annual Imports in '000s (2001-02)	Share of Imports
0	167	3.08%	40102	4.9%
5	1385	25.53%	157943	19.3%
10	826	15.22%	95207	11.6%
15	320	5.90%	45186	5.5%
20	996	18.36%	93543	11.4%
30	635	11.70%	91351	11.2%
25	1092	20.13%	294457	36%
Total	5426	100%	817789	100%

Source: Ministry of Finance & Economic Development and Ethiopian Customs Authority

The revision replaced the 22 tariff bands (down from 34 in 1995); with 82 percent of tariff lines at the six bands, 10 percent of tariff lines having zero duties and the balance representing various fractional rates. This reform eliminated the fractional rates (that are rates in between the above six rates). These fractional rates had unnecessarily complicated tariff administration and provided ample room for administrative discretion, without any economic justification. On the export side, duties on all exports other than coffee (the main export product) were removed. The coffee export duties were unified at 6.5%. But, this duty rate was exempted when export prices were below US \$ 0.55 for unwashed coffee and US 105 cents for washed coffee (IMF, 2004).

As part of the market-oriented reforms, initiatives have been taken to facilitate private sector participation in export trade. Perhaps the two major reform measures implemented to achieve this objective were the dismantling of the government monopoly in coffee trade and abolishing the mandatory approval requirement for export contracts by the National Bank of Ethiopia (NBE). Another measure to support exports has been the introduction of a foreign exchange retention scheme allowing exporters to retain part of their foreign exchange proceeds. At present, exporters

are allowed to retain 10 percent of the export proceeds without a time limit. Other measures to assist exporters include a bonded manufacturing warehouse scheme and an import duty rebate scheme aimed at providing exporters of manufactured goods imported inputs at world market prices.

These measures however remain virtually inactive because of administrative bottlenecks and opaque operational rules. Exporters of manufactured goods currently rely solely on the import voucher scheme to obtain duty exemptions on imported inputs. According to a recent survey conducted by the Ethiopian Economic Association (EEA) exporters have so far not benefited much from the various government-sponsored export support services.

3.3. AN OVER VIEW OF MACROECONOMIC ENVIRONMENT

Trade policies are dependent on macroeconomic stability. Without stability trade policies may not achieve the objective of increasing the tradability of the economy which is an essential element for increasing competitiveness and for realizing both static and dynamic gains from trade so as to maintain a sustainable balance of payment surplus and economic growth. Ethiopia's macroeconomic policies have been sound since the reforms of the early 1990s. This is indicated by low inflation which is also an important component of the macroeconomic environment. When inflation is high, price signals get distorted; the resulting "noise" can make it difficult for agents to respond accurately and rapidly to the changing incentives arising from liberalization, more stable exchange rates and sustainable current account deficits in the medium term. Though, there was a spike in inflation in 2002/2003 due to the drought that raised cereal prices, it is a temporary supply side shock that does not have its origin in public policy (NBE, 2002/2003).

Ethiopia has been able to achieve price stability following the cessation of hostilities with Eritrea and have a sustainable current account deficit financed mostly by official capital inflows. The Government was able to bring fiscal accounts under a measure of control following the increase in military expenditures during the war. This, combined with a bumper harvest in 2001, led to a decline in the consumer price index. In 2000/01, inflation was negative 7.2% and is expected to rise but remain close to international inflation, around 3.0%. The international prices of

Ethiopia's main export, coffee, have fallen leading to a large negative terms of trade shock to the economy (Dercon, S. 2002). Despite the shock, the economy maintained macroeconomic equilibrium. An assessment done by the IMF in connection with the Poverty Reduction and Growth Facility (PRGF) found that macroeconomic performance was broadly satisfactory.

Unfortunately, the last two years have been adverse for the country due to a severe drought, the worst since 1984. As a result, there was a large drop in agriculture output, leading to a contraction of real GDP in 2002/2003. Despite this adverse development, the country was able to sustain macroeconomic policies, continuing the stance that was established in the early 1990s (NBE, 2002/2003).

The attempts by countries to integrate themselves with the world economy have failed on many occasions not due to trade policies but rather due to the poor macroeconomic situations that prevailed in those countries when they attempted to liberalize their trade regimes. Ethiopia began the trade integration process in a context of more stable and credible macroeconomic policy. And, the situation has continued despite strong external (policy unrelated) shocks to the economy. The Ethiopian liberalization reform package of 1992/1993 was formulated with due emphasis on the complementarities between trade liberalization and macroeconomic management in shaping the reform outcomes. Trade liberalization was accompanied by a significant exchange rate reform backed by a firm commitment to fiscal and monetary discipline (DITS, 2002).

3.3.1. EXCHANGE RATE REFORMS

To maximize the sustainability of any trade liberalization, country must be achieved on the stabilization policy preferably before or soon after liberalization. One key link between stabilization and liberalization is the exchange rate. In the absence of stabilization, there is the danger that an appreciation in the exchange rate will be used to achieve stabilization at the expense of export goals and with the risk of balance of payments problems. Failure to achieve stabilization early also means more volatility as the exchange rate swings between appreciating and depreciating. The two key instruments available to the Ethiopian authorities are fiscal policy and monetary policy. If fiscal stability is not maintained and interest rates rise in compensation,

the higher rates will draw short-term capital flows, relaxing the external constraint, but at the expense of exchange rate appreciation and subsequent increases in import penetration. In terms of its effects on the real side of the economy, higher interest rates dampen investment and economic growth.

From the late 1940s through to the early 1990s the Ethiopian currency, the Birr remained rigidly pegged to the US dollar. During 1945-71 Birr/\$ rate remained unchanged at 2.5. It was revalued to 2.3 in December 1971 and then to 2.07 in February 1973 and remained at that level until October 1992. The natural outcome of this passive exchange rate policy was the development of an illicit parallel market for foreign exchange, where at times the spread between the two rates reached as high as 230 percent. The overvalued official exchange rate coupled with stringent foreign exchange rationing provided fertile ground for illicit cross border trade, particularly in coffee and live animals (Derege, 2001).

As part of the overall reform program of the new government, the exchange rate was adjusted from Birr/\$ 2.07 to 5.00 on 1 October 1992 (a 142% devaluation). Following the devaluation, the exchange rate was allowed to be determined according to demand and supply conditions in the foreign exchange market, with the National Bank of Ethiopia (NBE) intervening only to smooth out erratic fluctuations in the rate. By the end of 2002, the rate was around Birr/\$ 8.75. By the end of August 2003, the rate was Birr/ \$8.611. As of 16 July 2004, the rate was Birr/\$8.642. What obtains today can be broadly described as a managed float (NBE, 2004).

The NBE has taken a number of initiatives to improve the functioning of the foreign exchange market with a view to help keeping the exchange rate at realistic levels and to gradually harmonize the official and parallel foreign exchange markets. These included eliminating foreign exchange rationing, inaugurating a foreign exchange auction in May 1993 (on a fortnightly basis to begin with and on a weekly basis since September 1998), permitting commercial banks to open foreign exchange bureaus to engage in retail foreign exchange trading (October 1996), and permitting inter-bank foreign exchange trading (September 1998). Currently, the NBE is using the US dollar as the sole intervention currency, but has the option of pegging the Birr to other

specially tailored basket of currencies and revised foreign exchange Directive for the use and acceptance of credit cards, cash notes and travelers Checks (Revised directive No.FXD/21/2003).

Table 3.2: Official and parallel exchange rates

Year	Official exchange rates	Parallel exchange rates
1979/80	2.0700	2.9833
1980/81	2.0700	2.9550
1981/82	2.0700	3.2050
1982/83	2.0700	3.4200
1983/84	2.0700	3.7700
1984/85	2.0700	4.4350
1985/86	2.0700	4.3400
1986/87	2.0700	4.9250
1987/88	2.0700	6.3200
1988/89	2.0700	5.9183
1989/90	2.0700	6.0408
1990/91	2.0700	6.6667
1991/92	2.0700	9.5392
1992/93	4.2675	8.8169
1993/94	5.7744	7.0429
1994/95	6.2505	7.3000
1995/96	6.3178	7.6400
1996/97	6.5007	7.1600
1997/98	6.8817	7.0800
1998/99	7.5111	7.6900
1999/00	8.1426	8.3100
2000/01	8.3279	8.7900
2001/02	8.7470	8.6727

Source: National Bank of Ethiopia (NBE)

In its preamble, the directive reiterated that the revision was necessitated in order to enhance the payment system and introduce the instruments acceptable, which facilitate transaction as well as to widen the scope of operations and supplementing the services with cash notes and traveler checks concurrently used in settlement of services bills (NBE, 2003/04).

One indicator of the success of the stabilization relates to the exchange rate. Following these reforms, the gap between marginal and parallel exchange rates (the black market exchange rate premium) has declined sharply (Table 3.2). By 2002/2003, the black market premium was below 0.2 percent compared to 238 percent in 1991 (during the highest range in the black market rate). The floating exchange rate has been appropriately backed by a firm commitment to maintaining medium term macroeconomic stability. The fiscal deficit had been kept well within the limits (below 4 percent of GDP) agreed under structural adjustment programs, except during 1999-2001, when it increased to 11.2 percent of GDP because of war expenditures (NBE, 2004).

The foreign exchange reforms also included the lifting of restrictions on remittances by foreign nationals. Restrictions on the amount of foreign currency allowed for overseas medical and business expenses have been abolished. Foreign currency purchase of up to US\$1200 is now permitted per person for holiday travel. Exporters are allowed to retain up to 10% of their foreign exchange receipts in foreign currency deposits and sell the balance to any local bank or foreign exchange bureau at freely negotiated rates over an extended conversion period of four weeks (NBE).

In terms of the mode of deficit financing, the government has used non-inflationary sources, mainly external sources and to some extent non-inflationary domestic sources like public borrowing. Monetization of budget deficits has been largely eschewed while relying predominantly on borrowing from non-bank sources, mainly through the sale of bonds and treasury bills of 28, 91 and 182 days maturity.

3.4. THE STRUCTURE OF ETHIOPIAN EXPORTS AND IMPORTS

The association between trade liberalization and growth has been central in recent economic research, especially for developing countries. This debate has put particular emphasis on the export growth and economic growth relationship, since export promotion strategies seem to have constituted a superior development policy for most developing countries. The main benefits from higher export growth are the positive externalities which result from greater competition in world markets, that is, greater efficiency in resource allocation, economies of scale, and technological spillovers.

Recent developments in the trade policy literature focus on the potential dynamic effects of trade liberalization in reducing rent-seeking behavior and in accelerating the flow of technical knowledge from the world market. The benefits are derived from the greater access to new capital and intermediate goods, and also due to greater knowledge leading to faster imitation of advanced techniques (Romer, 1994; Grossman and Helpman, 1991).

In the case of the links between trade liberalization and exports, the basis for the analysis is the hypothesis that trade liberalization reduces anti-export bias and makes exports, especially non-Agricultural products, more competitive in international markets, mainly by reducing exchange rate distortions and export duties.

However, many developing countries have been and still are constrained by an export structure heavily dependent on one of a few primary agricultural commodities. Among them all those in sub-Saharan African (SSA) countries including Ethiopia did not manage to industrialize or diversify significantly their exports structure during the post-independence period. In addition to this, the performance of their agricultural products began to flatter in the late 1970's and has only very recently started to show some partial symptoms of recovery. Such satisfactory export performance, however, has been a major factor in contributing to the progressive deterioration of the balance of payments position and, more generally, to the overall economic growth (Kamin, S.B., 1988).

Agriculture, as is the case of in much of other developing countries, is still the largest sector in Ethiopia economy contributing about more than 50% to GDP and estimated to provide employment to 85% of the country's population that reside in rural areas. It generates about 90% of the export earnings, and supplies about 70% of the country's raw materials requirement for its agro-based industries. Thus, the growth of agricultural sector is vital to the national economic development by playing different roles in general and production of exportable commodities to pay for imports and reduce the gap in the balance of payment deficits. This necessitates: the sector should increase and diversify exportable agricultural products; it should improve the quality of the product to meet the demand of international consumers and with stand fierce competitions in the international market (MEDac, 1999).

Despite a considerable effort at diversifying the export mix of the Ethiopian economy, coffee still remains the country's single most important source of foreign exchange. Like many African countries, the macroeconomic policy of the Ethiopian government between 1974 and 1991 was biased against the production of coffee and other tradable. These biases came about as a result of inconsistent economic policies such as setting producer prices, establishing marketing boards that restricted the role of the private sector, imposing various taxes at various stages of production, marketing and export, and rationing the meager foreign exchange in favor of the state owned manufacturing and state farms. These restrictions, as well as other form of explicit and implicit taxes, led farmers to shift production from tradable to non-tradable. The most serious form of implicit tax was the over-valued exchange rate, which adversely affected the production of coffee and substantially reduced foreign exchange earnings. Since October 1992, the Ethiopian currency has been devalued by 242% and the state monopoly over marketing and the export of coffee abolished (Derege, 2001).

However, the structure of the Ethiopian export sector characterized by few agricultural products in the pre-reform and post-reform trade policy regime. The convectional wisdom is that dependence on primary commodity exports with limited destination is liable to quantity and price fluctuations as a result of supply side, demand side or a combination of the two shocks.

Table 3.3: Value of major export items (in thousands of Birr) before liberalization

Year	Coffee	Hides & skin	Chat	Oilseed	Pulse	Sugar	Others	T.Export
1980	524325	92705	22349	28371	23693	9775	41688	851509
1981	480287	98319	21236	19533	30871	7007	31709	778083
1982	495873	77302	37171	15349	28790	10416	35201	809625
1983	590445	93817	29001	27859	20623	10110	36965	929625
1984	466269	95408	15903	15640	16875	9342	25671	744572
1985	664790	119459	8477	7686	12635	10401	12120	923816
1986	524348	108291	28677	9793	8481	12629	39481	795284
1987	439181	133004	21323	22015	16093	14850	38181	773642
1988	626448	123528	7906	11029	16317	10003	53612	902753
1989	405103	134049	21024	8387	35961	37409	50376	736806
1990	268451	92206	20422	3633	15716	16362	77301	542485

Source: NBE annual report various years

Table 3.4: Value of major export items (in thousands of Birr) after liberalization

Year	Coffee	Hides & skin	Chat	Oilseed	Pulse	Sugar	Others	T.Export
1991	168324	58645	5073	383	386	1759	18079	279026
1992	536982	134515	65727	1186	4050	5090	16556	800814
1993	718019	203610	107932	44187	27704	25723	14999	1238729
1994	1799034	373549	172339	50130	103287	2227	97946	2732046
1995	1724008	309701	174444	41938	77224	-	107773	2539056
1996	2307394	372253	199533	74239	87854	4735	266272	3485626
1997	2889531	347699	272355	314660	102953	-	123227	4141582
1998	2112713	243052	444988	271462	101658	1241	200000	3637260
1999	2133646	286459	618772	255329	80021	23958	202930	3957802
2000	1520101	633752	510506	269598	72800	68472	487680	3866606
2001	1393809	474426	418674	278738	281409	85106	528768	3864320
2002	1418324	448003	497866	395565	171244	153712	585555	4142357

Source: NBE annual report various years

As can be read from table (3.3 and 3.4), in the last decades the export sector is characterized by over dependence on few agricultural commodities such as coffee, hides and skins, chat, oilseeds, pulse, sugar, and others. On the averages the combined share of six major export items constitute more than 85% of total export of which coffee constitutes nearly 60% of export earning followed by hides and skins.

This clearly indicates that the dependency on a single product for foreign exchange earnings has increased, making the country much more vulnerable to the effects of a monoculture export profile. Despite attempts made to diversify the export mix towards the end of the Derge regime, a single new major export product has not been developed since 1991.

One way of export sector diversification in Ethiopia may through effective utilization of the livestock potentials of the country. If this promising sector can be utilized and directed toward the production and export of both qualitatively and quantitatively better hides and skins, it will, at least partially reduce the risk of relying on coffee export alone, maximizing the country's foreign earnings.

Logically, hides and skins are raw materials for leather industry. The difference between the two is based on their size and thickness. Accordingly, the larger and heavier are being termed as hides while the smaller and lighter ones are called skins. Basically they are obtained from a variety of both domestic and wild animals.

According to FAO statistical compendium, Livestock population of Ethiopia in 1992 is estimated to be cattle 31.00 million, sheep 23.2 million, and goat 18.1 million average date for 1981-83 and 1990-92, that it was 14.75, 1.2 and 0.21 percent of cattle, sheep and goat respectively which show that it is higher than Africa's and the world (see the table below).

Table 3.5: Livestock population growth rate of the world, Africa and Ethiopia

Livestock	Regions	Average (1981-83)	Average 1990-92	Growth rate
Bovine Animal	World	1365369	1427371	4.54
	Africa	1778181	191335	7.38
	Ethiopia	26550	30500	14.88
Sheep And lamb	World	474794	1157965	3.73
	Africa	143344	204221	10.2
	Ethiopia	17985	23080	0.78
Goat And kids	World	474794	577458	21.62
	Africa	143344	169833	18.48
	Ethiopia	17985	17650	-1.86

Source: FAO, VN: Leather and leather improvement report, Rome, April 1990

As one can see from the above table, the cattle population growing of high rates (14.88) which depict the potential of the country, in which case of Ethiopia stands first in Africa and tenth order in world. However, sheep and goat growth rate is negative are an indications of poor attention given to the resources; though the positive high growth rate of cattle population does not mean an improved position in the sub-sector. Based on the prevailing conditions, such as population increase and the associated increase in the demand for farm land which decrease grazing land, and the absences of modern animal husbandry and lack of sufficient veterinary service, etc, one can imagine of about the quality of the enormous livestock resource. Further more the livestock rearing in Ethiopia is more for prestige and farming purpose emphasizing of quantity rather than quality. An improvement of management condition in the livestock rearing practice, However, this great resources can be utilized towards the production of significant amount of the good quality hides and skins so as to contribute highly to the export sector and decreasing the risk of relying on export of coffee alone and promoting the export sector at large.

Keeping in mind the above situation, one may consider the significance of hides and skins in export sector of Ethiopia. Hides and Skins are major sector of international trade in agricultural products next to coffee and are exported as raw, semi-processed forms. Even though share of

hides and skins in the total value of export has generally been increasing since 1987 due to the increase in value with procession, the value fluctuated from time to time.

Although exports have generally increased in terms of both volume and value since 1991, the sharp increase in the country's total foreign exchange earnings is largely attributed to: a) the increase in the volume of coffee exports significantly resulting from redirection from smuggling to official channels, b) the favorable world price for exports, c) an improved performance of services, and d) the rise in inward remittances. It is also attributed to the 1992 Birr devaluation and subsequent depreciation of the national currency on the auction market vis-à-vis the US dollar as the dollar earnings are converted into local currency at a much higher exchange rate. In general terms, the country's exports (with the exception of gold) have recovered quite remarkably since the initiation of the government's economic reform programmed in late 1992.

Table 3.6: Value of major imports (in millions of Birr) before liberalization

Year	Chemical	Capital goods	Fuel	Raw materials	Others	Total import
1980	91.44	449.70	342.73	53.68	446.73	1384.27
1981	108.89	452.10	350.12	54.72	663.34	1629.17
1982	99.46	577.00	397.00	60.20	619.24	1752.90
1983	83.28	930.20	378.50	72.90	603.75	2068.63
1984	90.60	515.10	317.80	49.70	795.22	1768.42
1985	123.90	742.20	252.50	83.30	1009.10	2211.00
1986	130.70	957.50	225.80	49.40	873.30	2236.70
1987	165.40	1071.50	216.50	53.90	767.40	2274.70
1988	201.50	822.70	212.90	54.50	818.80	2110.40
1989	177.10	707.38	225.13	58.70	655.89	1824.20
1990	93.50	964.30	210.36	56.91	805.23	2130.30

Source: NBE annual report various years

Table 3.7: Value of major imports (in millions of Birr) after liberalization

Year	Chemical	Capital goods	Fuel	Raw materials	Others	Total import
1991	137.30	467.93	249.30	28.40	927.98	1810.90
1992	134.60	1265.55	820.80	70.90	1326.85	3618.70
1993	281.70	1385.50	725.56	86.45	2261.08	4740.30
1994	475.90	2085.97	993.33	130.86	2860.24	6546.30
1995	449.05	2595.50	934.55	179.76	3083.44	7242.30
1996	446.50	3303.27	1568.52	173.65	3013.25	8505.20
1997	299.40	2780.52	2282.83	191.29	3783.96	9338.00
1998	726.30	3944.97	1329.87	203.93	5496.93	11702.00
1999	687.30	3831.33	2036.61	161.06	6399.51	13115.80
2000	944.1	3704.35	2436.60	199.92	5676.51	12961.48
2001	1157.23	4328.02	2159.63	224.80	6108.90	13978.58
2002	110.02	5326.03	2408.23	254.1	688.4	14485.29
2003	165.91	5426.12	2463.92	187.3	671.9	15929.50

Source: NBE annual report various years

On the other hand, Ethiopia's imports constitute raw materials, semi-finished goods, fuel, capital goods and consumer goods, with the capital goods taking the leading share though this has been overtaken by consumer goods in recent years. Total merchandise import rose by 10% and 22.8% to Birr15, 929.5million in 2002/03. from Birr 14,485.4 million in 2001/02 and Birr 12, 967.7million in 2000/01, respectively. Strong increases were noted in import values of fuel, capital and consumer goods. By comparison, the slow response of exports and the substantial increase in imports caused by escalating demand for consumer goods and capital goods imports to rehabilitate the economy since the initiation of the economic reform programmed led to an ever-widening trade deficit (NBE, 2002/03). For instance, trade deficit has grown from 7.17% of GDP in 1990 to 21.59% in 2002.

As can be seen from the table (3.8 and 3.9) below, Ethiopia has always registered negative balance in its merchandise trade. The implication of negative balance is that export incomes have

never been sufficient to cover imports. According to the tables, the merchandise trade gap has always been deteriorated. Recent data also shows that such deficit is much more pronounced in the year 1994/1995 and even double in 1995/96, On the other hand in 1997/98 the merchandise exports recorded Birr 4,141:60 million the increase of 6.4 percent over the birr 3,891.50 million in 1996/97. But still there is negative trade balance due to the fact that an increase in imports and decline in gold, leather and leather products and fruits and vegetables exports (NBE, 1998).

Table 3.8: Total value of exports, imports, visible balance of trade (in million of Birr), balance of trade as share of GDP (TB/GDP) and the balance of payments before liberalization

Year	EXPORT VALUE	IMPORT VALUE	TRADE BALANCE (TB)	TB/GDP	BOP
1979/80	948.53	1369.89	-421.4	-5.404	204.4
1980/81	839.56	1384.27	-544.7	-7.854	5.1
1981/82	793.77	1629.17	-835.4	-8.012	176.1
1982/83	809.54	1752.90	-943.4	-10.369	-214.4
1983/84	929.26	2068.63	-1139.4	-7.867	-154.8
1984/85	743.63	1768.42	-1024.8	-9.482	199.7
1985/86	923.82	2211.00	-1287.2	-10.015	222.2
1986/87	795.28	2236.70	-1441.4	-9.93	-212.1
1987/88	788.10	2274.70	-1486.6	-7.57	-586.2
1988/89	918.20	2110.40	-1192.2	-6.34	-278.8
1989/90	756.90	1824.20	-1067.3	-8.12	-741.8
1990/91	572.10	2130.30	-1558.2	-7.17	-398.6

Source: Computed from NBE, annual report, various years

The amount of trade deficit and the balance of payment deficit increase after liberalization relative to before liberalization which could be explained not only as export and import structures but also as policy and other structural change problems which need systematic management to minimize the deficit in the trade balance and the balance of payment in Ethiopia.

Table 3.9: Total value of exports, imports, visible balance of trade (in million of Birr), balance of trade as share of GDP (TB/GDP) and the balance of payments after liberalization

Year	Export value	Import value	Trade balance	TB/GDP	BOP
1991/92	319.20	1810.90	-1491.7	-10.006	-562.0
1992/93	949.90	3618.70	-2668.8	-11.72	-647.7
1993/94	1419.20	4740.30	-3321.1	-10.95	1235.9
1994/95	2835.10	6546.30	-3711.2	-12.22	785.9
1995/96	2607.10	7242.30	-4635.2	-11.127	-558.4
1996/97	3891.50	8505.20	-4613.7	-11.59	-1943.8
1997/98	4141.58	9338.00	-5196.4	-16.65	-791.1
1998/99	3637.30	11702.00	-8064.7	-17.62	-3930.7
1999/00	3957.80	13115.80	-9158.0	-17.86	-3677.4
2000/01	3681.86	12961.48	-9279.6	-20.48	-1016.1
2001/02	3516.29	13978.58	-10462.3	-21.59	104.1
2002/03	4142.40	15929.50	-11787.2	-21.59	-562.0

Source: Computed from NBE, annual report, various years

Various factors have been claimed as major reason for the poor performance of the export sector. The structure of exports has been remained the same over along period both in kind and nature. According to Fantu Cheru (1990), deterioration in the term of trade resulting from declining in commodity prices and increased cost of imports has leads to such a chronic trade and balance of payment deficit. In fact the majority of developing countries are still heavily dependent on one or two principal commodities in their export trade, and relatively few countries have yet achieved any substantial improvement in the diversification of their export trade. The narrow commodity specialization, for which the world market is sluggish, has been the main hindrance in the export sectors of least developing countries (Jhingan, M.L 1982). This is for sure, an exact description of Ethiopia's export sector. It is characterized by having a narrow structure, consisting of a very limited number commodities mainly agricultural origin. The main exportable items are coffee, hides and skins (including leather and leather product), oil seeds, pulses, cereals, fruits and

vegetable, meat products and chat. But, coffee has always been the most important sources of foreign exchange.

The country's heavy dependence on coffee is the general feature of the export sector. In the period 1980/81-1998/99, for instance, the percentage share of coffee in the total export earnings, on the average was more than 61 percent (Bayisa, 2001). In fact, the country's export sector, in this regard, can be said a single commodity sector. And as a result, significant variation as in the world price of coffee greatly affected the stability of foreign exchange earnings of the country. From table 3.3 and 3.4 above one can observe that the ups and downs in the total values of exports, in almost all the cause were the reflections of the same trend in the value of coffee. So far, the contribution of the remaining few primary export commodities is of minor importance and substantial fluctuations. If we see the manufacturing sector, it is yet at its infant level. But its contribution has been growing with a positive rate through fluctuating over a time (NBE, various issues).

In general, we have seen that, under the present conditions, Ethiopia can not have a constant and reliable source of foreign exchange earnings. Thus if the export sector of Ethiopia is to be the backbone of the economy, a greater effort is required so as to make it a reliable and sustainable export earner. A country of significant resources and potentials, Ethiopia, should at least, be able to stop to be called the poorest among the poor. A scale, in this regard can be made through improving the performance of the export sector by diversifying the current narrow export base.

Furthermore, if we see the direction of Ethiopia's export by destination (NBE, annual reports various issues) and the origin of imports into the country has remained conspicuously loyal. Going as far back as 1980 and even further in time the major trading partners remain European, Asia, and the Americas (both North and Latin America).

Among European countries: Germany, Italy, France and England which together account for no less than 85% of European and about 40% of the total export. Japan has always been the largest Asian partner; and south Arabia from the Middle East as an out let for coffee (Bayisa, 2001).

Ethiopia's imports also are mainly from the above-mentioned countries and, as mentioned earlier, the balance of trade, with Ethiopia's major trade partners (except that Djibouti, Sudan and Saudi Arabia) has always been negative (NBE, 1997).

Therefore, it is clear from the discussion that the dominance of very few agricultural commodities and very few market outlets for them has been the major bottlenecks of the export sector. The fact that it is both commodity and geographic concentrated has exposed the export sector and the economy at large to cyclical internal and external shocks. Diversified export items together with expanded market outlets on the other hand give the country strategically located to invade one of the richest markets in the world. Though in the long run, a move towards manufactured export is believed to be appropriate, in the short run, resource based diversification is an immediate remedy to the country.

It has been mentioned in chapter two of this paper that what a country exports and imports are dictated by its comparative advantage. It will produce and export those goods and services that use it most abundant resources and are therefore relatively cheaper than those of its competitors, and imports those goods and services that require inputs that it either does not have or are scarce. This explains why Ethiopia exports primary agricultural commodities and imports industrial goods, including machines.

The important point about trade policy is the dynamic nature of comparative advantage. The fact that Ethiopia has comparative advantage in tropical agriculture and comparative disadvantage in industrial good is not an immutable law of nature but one that can and does change. The essence of trade policy, in conjunction with its overall development policies, is therefore to change this comparative advantage by importing investment goods and services to expand the industrial and agricultural sector, skills and knowledge to build up its human capital concurrently strike to increase total factor productivity, thereby rendering the economy more competitive both in the home and the world markets.

3.5. THE SIZE AND SUSTAINABILITY OF THE CURRENT ACCOUNT DEFICIT

The current account in Ethiopia has been in permanent deficit throughout the last three decades. A country experiencing a current account deficit may not necessarily be indicative of structural or policy problems. A temporary increase in government expenditure, investment or a decline in productivity can generate a current account deficit and in this case there is no need on the part of the government to initiate policy measures to correct such a deficit. A similar situation occurs when the deficit reflects consumption smoothing of private economic agents or indicates a need for the economy to accelerate growth in the future in order to be able to repay the borrowed foreign savings. Nevertheless, external imbalance, in many cases, forces the government to adopt some costly adjustment measures to avoid destabilizing shifts in market sentiment. Unfortunately, this is the case for many developing countries and Ethiopia is no exception.

Possibilities that the large current account deficit in Ethiopia before the introduction of adjustment policies reflected a consumption smoothing by private agents or that it was desired by policy makers for economic objectives could easily be ruled out. On the one hand, consumption smoothing by private agents depends on unrestricted access to borrowing from financial markets and this is not the case for Ethiopia. On the other hand, taking the risk of running a large current account deficit in country like Ethiopia with a weak economic structure, undeveloped banking system and large external liabilities is undesirable. In fact, even if the current account deficit appeared to be sustainable, there would be a case for reducing it in order to lower the risks arising from such factors. Yet both macroeconomic policy and structural weaknesses contributed to the large current account deficit in Ethiopia.

Generally, two concepts are used in the literature to judge whether an external position of a given size is a problem or not. These concepts are enter-temporal solvency and the sustainability of a given path of external deficit. The first approach requires that all external debts should ultimately be repaid for a country to be technically solvent in the very long run. The sustainability approach adds on to the notion of solvency the idea that policies remain constant for the indefinite future.

For a given current account deficit, large and persistent trade deficits may indicate structural competitiveness problems, while large and negative net foreign factor incomes may be the historical remnant of foreign debts incurred in the past. For a country to remain solvent, the ratio of external liabilities to the GDP should be stabilized since the accumulation of debts cannot be ruled out as a factor affecting the current account position in Ethiopia.

Table (3.8 and 3.9) above shows that the trade balances and the balance of payments in Ethiopia has recorded a growing deficit since the early 1990s. The reason for this is sluggish export performance and escalating import growth. The table shows that the trade balance and the current account take the same trends, indicating that the trade deficit was a main driving force of the current account deficits. It also indicates a clear problem with Ethiopia's export competitiveness. However, liberalization policies failed to correct this situation, and the deficit remained large in both the current account and the trade balance.

CHAPTER IV

4. EMPIRICAL FRAMEWORK AND RESULTS

4.1. Introduction

Developing countries have experienced extensive and rapid trade liberalization in recent Years which undertaken both in the context of multilateral trade negotiations and as part of the conditionality linked to structural adjustment and stabilization programs agreed with the International Monetary Fund (IMF) and the World Bank(WB).

Following trade liberalization, Krueger (1978) suggests that there is evidence that import flows respond more rapidly than exports, causing 'temporary' trade imbalances. However, up to now there has been no in-depth systematic empirical study of the impact of trade liberalization on the balance of trade and the balance of payments taking a large sample of developing countries.

The aim of this paper is to examine the empirical analysis of the balance of payments consequences of trade liberalization in Ethiopia for the period 1970/71 to 2002/2003. It focuses on the impact of trade liberalization on the trade and current account balances of the balance of payments. The main question addressed is whether there has been an improvement or deterioration in these accounts following trade reform. The liberalization episodes are measured in two ways. First, an indicator of the duties applied to exports and imports is used (Export and Import duties as a share of real GDP); second, a dummy variable is applied to the year identified as the main liberalization episode, based on the criteria published by the World Trade Organization Trade Policy Reviews, the World Bank (WB) and International Monetary Fund (IMF) country and region specific studies and other sources.

4.2. EMPIRICAL MODELING

The effect of trade liberalization on the trade balance and the balance of payments is theoretically still mixed whatever framework of balance of payments analysis is used. In the partial equilibrium framework of the elasticity approach, the effect will depend on the extent to which import and export duties change and the price elasticity of imports and exports (the Marshal-Lerner condition). The main idea of this view is the substitution effects in consumption explicitly and production implicitly induced by the relative price, domestic versus foreign, changes caused by devaluation. Measuring the balance of payments in foreign currency, export earnings will increase if the price elasticity of demand exceeds one, and import payments will increase if the price elasticity of demand is greater than zero.

One of the aims of this paper is whether or not the Marshal-Lerner condition empirically holds for a developing country such as Ethiopia. The Ethiopian economy might be better characterized by the small country case. Thus, devaluation might or might not improve the trade balance.

In the general equilibrium framework of the absorption approach to the balance of payments, the effect of liberalization will depend on how real income is affected relative to real absorption. Author such as Harberger (1950), Meade (1951), and Alexander (1952, 1959) came to be part of a new body of analysis to the balance of payments (Krueger, 1983; Kenen, 1985). This approach shifted the focus of economic analysis to the balance of payments and solved some of the original criticisms of the elasticity approach to balance of payment. The core of this approach is the proposition that any improvement in the trade balance requires an increase of income over total domestic expenditures.

A reduction in export duties will shift expenditure to home produced goods, there by raising income, but a reduction in import duties does the opposite. Even if real income increases, the balance of payments will improve if the propensity to absorb is greater than one. Then, there are the direct effects on absorption to consider. If trade liberalization reduces prices, this will increase real absorption through a real balance effect and money illusion, but will decrease

absorption if this is a redistribution of income to the traded goods sector where the propensity to save is high.

An alternate approach to the balance of payments has emerged since the end of 1950s. It is the modern monetary view to the balance of payments. The core of this approach is the claim that the balance of payments is essentially a monetary phenomenon (Frenkel and Johnson, 1977). Accordingly, the balance of payments behavior should be analyzed from the point of view of the supply of and demand for money. Given that a study that examines the effects of liberalization would be incomplete without explicitly considering money indeed, devaluation is something that happens to the value of a currency, and that particular nature of the Ethiopia's liberalization arrangement such as a system of foreign exchange rate bands, tariff and non-tariff reduction. Thus one of the aims of this study is to test empirically the relevance of monetary approach to balance of payment adjustment of Ethiopia.

Given this theoretical mix up, the impact of liberalization on the trade balance and the balance of payments become an empirical issue. For instance, Ostry and Rose (1992) gave recognized this in their analysis of tariff changes, and found no statistically significant effect of tariff changes on the real trade balance in their empirical analysis of five different data sets including one for developing countries.

The impact of liberalization on trade performance is measured in monetary terms because it is the nominal gap between imports and exports which measures a country's shortage of foreign exchange, and how much countries need to borrow to sustain growth if liberalization worsens the payments position. The effect of trade liberalization on the trade balance and the balance of payments is measured by estimating two equations which control for income, money, real effective exchange rate and liberalization dummy which may capture effect of liberalization as a separate variable.

In order to investigate precisely the impact of duty reductions and liberalization on the trade balance (TB) and the current account of the balance of payments (BP), both dependent variables are take the trade balance and current account as a share of real GDP (TB/GDP and CA/GDP).

The model is adopted from dynamic panel data models of trade liberalization and the balance of payments in selected developing countries which basically derived from standard export and import demand functions in which the growth of exports and imports are the function of income and prices. The data will be analyzed by estimating the time series econometric models using OLS and ECM frame works to test the impacts of trade liberalization on trade balance and the current account of the balance of payments in the short-run and the long-run. The basic estimating equations specified for trade balance as follows:

$$TBGDP_t = a_0 + a_1 LDYGT_t + a_2 LWYGT_t + a_3 LREER_t + a_4 LM_{1t} + a_5 XTRS_t + a_6 MRTS_t + a_7 lib_t + E_t$$

(1)

Where a_0 = a constant term

E_t = the error term

L = the natural logarithm of a variables

$LWYGT_t$ = the growth of real world income over a time

$LDYGT_t$ = the growth of real domestic income over a time

$LREER_t$ = rate of change of real effective exchange rate

LM_{1t} = growth of domestic money stock

$XTRS_t$ = export duties as a share of total exports

$MRTS_t$ = import duties as a share of total imports

Lib_t = a liberalization shift dummy which has the value of 0 and 1 before and after liberalization respectively.

These variables thought to capture the effects of liberalization on the trade balance in a model that puts together the elasticity, absorption, and monetary approaches to the balance of payments. Theoretically, the marginal effect of domestic real GDP growth on TB/GDP will be expected to be negative as Ethiopia, like other developing countries, likely to grow faster than developed countries and her import propensity will be higher than export propensity in the short-run. The higher growth in developed economies will improve the trade balance to GDP ratio as the developing countries are likely to export more to the developed world since growth in the industrialized world creates demand for commodities and raw-materials including intermediate products.

From the point of view of the monetary approach (Hallwood and MacDonald, 1994), keeping other variables constant, if the economy growth over a time, it may resulted to trade surplus. The reason is the implicit assumption that income growth raises expenditures by less than output, therefore improving the trade balance.

As for the money variable, the following is expected. Under the absorption approach following Keynesian assumptions the money supply is an exogenous variable; it is a policy instrument. Thus, the monetary authorities offset, or sterilize through open market operations, the impact on the domestic money stock of foreign exchange market intervention. It follows that; there should be no effect of the money stock on the balance of payments and on expenditures. On the other hand, the monetary approach argues that in a fixed exchange rate regime the money supply is endogenously determined by the interaction of the supply and demand of the money stock.

The impact of exchange rate changes on trade balance is mixed, that is, a_3 could be positive or negative. If there is a real depreciation or devaluation of the domestic currency, that is REER increase, then the increased competitiveness in prices for the domestic country should result in it exporting more and importing less /the volume effect. However, the higher REER also increases the value of each unit of import the(import value effect) which would tend to diminish the trade balance. Especially in the short run import value effects prevail, whereas the volume effects dominate in the longer run $a_3 > 0$ satisfies the Marshall-Lerner condition. The expected signs of the coefficients of others variables; a_5 is negative, a_6 is expected to be positive, and a_7 is undetermined.

Since trade liberalization not only affects merchandise trade but also services, this study further test for the impact of liberalization on the current account of the balance of payments as a share of GDP (AC/GDP). The AC/GDP model is specified as follows:

$$ACGDP_t = b_0 + b_1 LDYGT_t + b_2 LWYGT_t + b_3 LREER_t + b_4 LM_{1t} + b_5 XTRS_t + b_6 MRTS_t + b_7 lib_t + v_t \quad (2)$$

Where b_0 = the constant

v_t = the error term.

L = the natural logarithm of a variables

$LWYGT_t$ = the growth of real world income over a time

$LDYGT_t$ = the growth of real domestic income over a time

$LREER_t$ = rate of change of real effective exchange rate

LM_{1t} = growth of domestic money stock

$XTRS_t$ = export duties as a share of total exports

$MRTS_t$ = import duties as a share of total imports

Lib_t = a liberalization shift dummy which has the value of 0 and 1 before and after liberalization respectively. The variables and the expected signs of the b 's are the same as the variables and coefficients of equation (1).

4.2.1. UNIT ROOT TESTS

To investigate whether there is a stable linear steady-state relationship between the interested variables; unit-root and co-integration tests are applied to each variable in (1) and (2). Unit-root tests show if a time-series variable is stationary. Co-integration analysis determines the long-run (co-integrating) relationship between the variables in (1) and (2) when all the variables are found non-stationary at level (i.e., have unit roots). In order to test for unit roots in the sample data, this study employs the Augmented-Dickey-Fuller (ADF) tests on both levels and differences of all the variables in (1) and (2). If all variables studied are $I(1)$, one can then use the Johansen maximum likelihood (ML) method (Johansen (1988), Johansen and Juselius (1990)) to test whether these variables are co-integrated. The Johansen approach allows testing in a multivariate framework and avoids some of the drawbacks of the Engle-Granger (1987) co-integration method. In contrast to the Engle-Granger procedure, the Johansen approach considers the error structure of the data processes, allows for interactions in the determination of the relevant economic variables and is independent of the choice of the endogenous variables. Most importantly, the Johansen

approach allows explicit hypotheses tests of parameter estimates and rank restrictions using likelihood ratio tests (Johansen and Juselius (1992), Strauss (1996).

Table (4.1) below shows that the null hypotheses of a unit root cannot be rejected for all the regression variables even at 1% critical value of ADF. This shows the existence of a unit root in all variables.

Table 4.1: Unit root test for regression variables at level

Variables	ADF(without trend)	ADF(with trend)
TBGDP _t	0.507219	-1.984060
ACGDP _t	-0.515501	-2.356239
LRGDP _t	-0.17181	-2.549027
LRWGDP _t	-2.195357	-1.617662
LREER _t	-1.245733	-1.254133
XTRS _t	-1.425312	-2.591508
MRTS _t	-1.509250	-1.989388
LM1 _t	-2.297743	-2.222114

1% critical value of ADF without trend and with trend -3.6576 and -4.2826 respectively
 5% critical value of ADF without trend and with trend -2.4541 and -3.5614 respectively
 10% critical value of ADF without trend and with trend -2.6181 and -3.2138 respectively

Table 4.2: Unit root test for regression variables' first differences

Variables	ADF(without trend)	ADF(with trend)
TBGDP	-4.984525	-5.127629
ACGDP	-5.983031	-5.954261
LRGDP	-6.214397	-6.489749
LRWGDP	-2.902508	-3.933823
LREER	-4.084510	-4.378743
XTRS	-3.461771	-3.521264
MRTS	-5.301695	-5.211188
LM1	-4.149759	-4.895151

1% critical value of ADF without trend and with trend -3.6661 and -4.2949 respectively
 5% critical value of ADF without trend and with trend -2.9627 and -3.5670 respectively
 10% critical value of ADF without trend and with trend -2.6200 and -3.2169 respectively

Table (4.2) shows the unit root tests for the variables' first difference. From this table, the null hypothesis of unit roots is rejected for all variables. This implies that the variables are difference stationary, i.e. integrated of order one $I(1)$.

4.2.2. COINTEGRATION TESTS

Provided that all the variables in the model are non-stationary and integrated of order $I(1)$, then the Johansen maximum likelihood (ML) method (Johansen (1988), Johansen and Juselius (1990)) can be applied to test whether these variables are co-integrated. The Johansen approach allows testing in a multivariate framework and avoids some of the drawbacks of the Engle-Granger (1987) co-integration method. But this study used both methods to test existence of a long-run relationship between variables. The result of Johansen co-integration test and Engle and Granger method show there is co-integration and existence of a long-run relationship between the variables in equation (1) and (2).

In applying Engle and Granger (1987), after estimating equation (1) and (2) by OLS estimation and conducted ADF-test for the residual from this estimation. The results of the OLS estimation are shown in Table (4.3) and (4.4). The ADF test for the residuals gives the value of (-3.72) which is larger than (-3.65 which is 99 percent critical value) for $TBGDP_t$ and (-4.43) which is larger than (-3.65 which is 99 percent critical value) for $CAGDP_t$ and hence the unit-root hypothesis can be rejected which means that there is co-integration and existence of a long-run relationship between the variables in equation (1) and (2).

Table 4.3: Long-run OLS Estimation Result of TBGDP_t

Variable	Coefficient	Std. Error	t-Statistic	Prob
Constant	67.86	51.58	1.31	0.20
LRGDP _t	-15.38	6.16	-2.47	0.01
LRWGDP _t	0.16	2.02	0.08	0.93
LREER _t	8.59	3.98	2.15	0.04
LM1 _t	-6.90	3.00	-2.29	0.03
XTRS _t	-0.04	0.04	-0.99	0.32
MRTS _t	0.21	0.06	3.28	0.00
LIB	0.54	1.78	0.307	0.76

R-squared=0.92, Adjusted R-squared=0.90 DW=1.899 F-stat=42.52

Table 4.4: Long-run OLS Estimation Result of CAGDP_t

Variable	Coefficient	Std. Error	t-Statistic	Prob
Constant	72.80	50.06	1.45	0.15
LRGDP _t	-11.92	5.97	-1.99	0.05
LRWGDP _t	3.52	3.86	0.91	0.37
LREER _t	0.02	1.96	0.01	0.99
LM1 _t	-2.55	2.92	-0.87	0.38
XTRS _t	-0.02	0.04	-0.64	0.52
MRTS _t	0.20	0.06	3.28	0.00
LIB	1.66	1.73	0.96	0.34

R-squared=0.81 Adjusted R-squared=0.77 DW=2.19 F-stat=15.88

4.2.3. LONG-RUN RESULTS

$$\text{TBGDP}_t = 67.8 - 15.3\text{LRGDP}_t + 0.16\text{LRWGDP}_t + 8.5\text{LREER}_t - 6.9\text{LM1}_t - 0.04\text{XTRS}_t + 0.21\text{MRTS}_t + 0.54\text{LIB}$$

t-statistics (-2.5) (0.08) (2.2) (-2.3) (-1.0) (3.5) (0.3)

The OLS estimation result indicates that the coefficient of domestic real income variable is negative and statistically significant .The result indicates that, ceteris paribus, an increase in real domestic income increase imports this in turn causes the trade balance worsen. The coefficient of real foreign income is positive but insignificant.

The coefficient of real effective exchange rate, which may capture the impact of devaluation on trade balance of Ethiopia, is positive and statistically significant. This indicates that devaluation of the Birr improve trade balance of Ethiopia in the long-run.

The coefficient of domestic money supply variable is negative and statistically significant. This implies that domestic money supply has an effect on trade balance. It should be noted, however, that the negative sign of the coefficient of the domestic money supply variable in the trade balance equation is consistent with the argument that an increase in domestic money supply would lead to an increase in the level of real balances. Now, if individuals perceive the rise in the level of real balances as a rise in their wealth, this will cause the level of expenditure to increase relative to income, resulting in the trade balance to deteriorate (see Johnson, 1977).

The coefficient of export duties is negative but not strongly significant and import duties are positive and statistically significant. The result indicates that export tariff worsen trade balance and import tariff improve trade balance in which case Ethiopia needs to protect to some extent even in the long-run until the primary agricultural export items become competitive in the world market. However, protection may not only through tariff and non-tariff but also through policy measures.

$$CAGDP_t=72.8-11.9LRGDP_t+3.5LRWGDP_t+0.02LREER_t-2.5LM1_t-0.02XTRS_t+0.20MRTS_t+1.6LIB$$

t-statistics	(-1.99)	(0.91)	(0.01)	(-0.88)	(-0.64)
(3.3)	(0.96)				

From these results, there is a negative and significant relationship between the current account balance and GDP growth in the long-run (although the coefficient is small). This could imply that policies that have been followed internally to increase GDP growth have brought about a negative impact on the current account in the long-run. The result also shows that there is a positive and significant relationship between the current account balance and import duties as share of total import. This is may be the indication for the needs of protection even in the long-run.

The other variables are with appropriate expected sign but they are not statistically significant strongly. With regarding the money variable, still negative which is the same to trade balance but not strongly significant as trade balance.

4.2.4. SHORT-RUN RESULT

Table 4.5: Short-run OLS Estimation Results of DTBGDP_t

Variable	Coefficient	Std. Error	t-Statistic	Prob
Constant	-0.61	0.76	-0.79	0.43
DLRGDP _t	-6.05	6.32	-0.95	0.34
DLRWGDP _t	-3.20	1.98	-1.61	0.11
DLREER _t	4.06	6.45	0.62	0.53
DLM1 _t	-0.27	2.73	-0.09	0.92
DXTRS _t	0.03	0.05	0.79	0.43
DMRTS _t	0.11	0.03	3.11	0.00
ECM(-1)	-0.68	0.19	-3.58	0.00
LIB	0.20	0.75	0.26	0.79

R-squared=0.67 Adjusted R-squared=0.55 DW=1.78 F-stat=4.68

$$DTBGDP_t = -0.61 - 6.05DLRGDP_t - 3.2DLRWGDP_t + 4.06DLREER_t - 0.27DLM1_t + 0.04DXTRS_t + 0.12DMRTS_t - 0.68ECM(-1) + 0.20LIB$$

t-statistics

(-0.95)

(-1.62)

(0.62)

(-0.09)

(0.79)

(3.11)

(-3.58)

(0.26)

The short-run estimates indicate that the significant coefficients are import duties as shear of real GDP, real world income but negative coefficient, and domestic real income. The rest of the variables are insignificant with appropriate sign and negatively to variations of the money stock.

The speed of adjustment coefficient is significant. This means that the speed at which the rate of variation of the trade balance (DTBGDP_t), the dependent variable in the first equation of the ECM system, adjusts towards the single long-run co-integrating relationship differs from zero. In other words, the equation for the trade balance (DTBGDP_t) contains information about the long-run relationship since the co-integrating vector does enter into this equation. According to the estimates, short-run trade balance disequilibria is corrected to a speed of 68% per year.

Table 4.6: Short-run OLS Estimation Results of DCAGDP_t

Variable	Coefficient	Std. Error	t-Statistic	Prob
Constant	-0.80	0.78	-1.02	0.31
DLRGDP _t	-3.37	6.28	-0.53	0.59
DLRWGDP _t	2.07	6.59	0.31	0.75
DLREER _t	-3.62	2.01	-1.79	0.08
DLM1 _t	3.36	2.79	1.20	0.24
DXTRS _t	0.04	0.05	0.84	0.40
DMRTS _t	0.15	0.03	4.00	0.00
ECM(-1)	-0.78	0.21	-3.71	0.00
LIB	0.55	0.76	0.72	0.47

R-squared=0.69 Adjusted R-squared=0.60 DW=1.96 F-stat=6.7

DCAGDP_t = -0.80 - 3.37DLRGDP_t + 2.07DLRWGDP_t - 3.62DLREER_t + 3.36DLM1_t + 0.04DXTRS_t

t-statistics

(-0.53)

(0.31)

(-1.79)

(1.20)

(0.84)

+ 0.15DMRTS_t - 0.78ECM(-1) + 0.55LIB

(4.00)

(-3.71)

(0.72)

The short-run result shows that the variables that affect the current account balance in the short-run are the changes in the real effective exchange rate, the changes in money stock and the change in import taxes. This indicates and there is a need for protection to some extent trade in services in the short-run. The rest of the variables are insignificant. However, the error correction term is highly significant with the correct sign with a coefficient of (0.78), which indicates that adjustment to the equilibrium is quite fast.

CHAPTER V

5. CONCLUSION AND RECOMMENDATIONS

5.1. CONCLUSION

The effect of trade liberalization on the trade balance and current account of the balance of payments is controversial irrespective of the framework used for the analysis of balance of payments. In the elasticity approach to balance of payments, the effect of liberalization will depend upon the price elasticity of exports and imports. If the impact is measured in foreign currency, export earnings will increase if the price elasticity is greater than one and import payments will increase if the price elasticity is less than one in absolute terms. In the absorption approach to balance of payments, the effect of liberalization will be realized through real income changes. Even if real income increases, the balance of payments may not improve if the absorption propensity is greater than unity. If trade liberalization reduces prices, this will increase real absorption through a real balance effect and money illusion, but it could decrease absorption if there is a redistribution of income to the traded goods sector where the propensity to save is higher than that in non-traded sector. In the monetary approach to balance of payments, the liberalization could affect both demand and supply of real money balances.

In recent research on trade liberalization, not much attention has been given to the issue of imports, the balance of trade and current account of the balance of payments. It is conceivable that trade liberalization may lead to faster growth of imports than exports if the countries were highly protected in pre-liberalized period. The faster growth in imports in relation to exports could have serious implications for balance of trade and this in itself could constrain economic growth in some of the developing economies. Trade liberalization may promote growth on the one hand from the supply side through a more efficient allocation of resources while it may constrain growth from the demand side unless a balance between exports and imports can be maintained through trade policies such as real exchange rate depreciation or deficits in the short run can be financed by capital inflows.

7 Inheriting an economy emerging from a three-and-a-half-year recession that itself followed nearly two decades of decline, Ethiopia's new government gave urgent priority in 1992/93 to the challenge of reversing the country's deteriorating positioning and increasingly globalize economy. One symbol of its break with the economic policies of the past and a key element of its drive to achieve accelerated economic growth was the new regime's liberalization of the external trade regime. The new development strategy includes: market liberalization; large devaluation; a reduction of public expenditure; reduction of price control and subsidies; the size of the public sector is greatly reduced through wide-ranging privatization; and some steps towards trade liberalization such as reduce export restriction and import controls, considering tariff and non-tariff barrier and exchange rate distortions.

8 As Ethiopia been restructuring its economy and transforming some of its foreign trade sector, its export performance has greatly improved over earlier periods but not yet reached the capacity needed for lasting success in global competition. Although it has managed to increase slightly the value and volume of exports command in the markets of its traditional trading partners and in the world, a significant portion of the overall increase in exports has resulted from greater trade with limited destination in the world. In view of both its progress and the global challenges it faces, Ethiopia will need to redouble its export-oriented efforts and strenuously adjust its market positioning to ensure that sales abroad make their full contribution to economic growth at home through time.

9 The aim of this paper is to examine the empirical analysis of the balance of payments consequences of trade liberalization in Ethiopia for the period 1970/71 to 2002/2003. It focuses on the impact of trade liberalization on the trade and current account balances of the balance of payments. The main question addressed is whether there has been an improvement or deterioration in these accounts following trade reform. The liberalization episodes are measured in two ways. First, an indicator of the duties applied to exports and imports is used (Export and Import duties as a share of real GDP); second, a dummy variable is applied to the year identified as the main liberalization episode, based on the criteria published by the World Trade Organization Trade Policy Reviews, the World Bank (WB) and International Monetary Fund (IMF) country and region specific studies and other sources. Special attention has been paid to

identifying the year(s) when significant liberalization took place (and then continued), and considerable attention has also been paid to the construction of time series for the duties applied to exports and imports over the period of analysis, which are also used as measures of liberalization. The OLS estimation techniques used have provided results that are strong and robust to the different specifications estimated. The findings may be summarized as follows.

My tentative findings are on the relationship between liberalization and trade balance and current account balance while other factors affecting these relationships are taken into consideration. Overall, liberalization contributes some how to economic growth over the period 1970/71-2002/2003. But, liberalization worsens both trade deficits and current account deficits when the entire period is considered. That is, Economic growth in a domestic economy increases trade and the current account deficits in the period under study.

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+ However, the significance of domestic economic growth on current account deficit is not as strong as on trade deficit due the fact that services liberalization is different from trade in goods because the former necessarily involves factor mobility and leads to scale effects that are distinctive though not unique. It is possible to construct policy-based rather than outcome-based measures of liberalization for the services sectors that capture these differences. Unlike in trade in goods where the policy liberalization measure needs to capture only the liberalization to foreign supply, in the case of services liberalization measures must capture both the policy regime toward inward flows of foreign factors such as foreign direct investment(FDI) and measures that promote domestic competition.

The variable specification of statistical model showed that real effective exchange rate does play a role in determining the short-and-long-run equilibrium behavior of the Ethiopian trade and the current account balance. There fore, the trade and the current account balance can not be treated as exogenous with respect to real effective exchange rate. These findings constitutes evidence against the literature that claim no direct relation ship between the trade balance, real effective exchange rate, income, and domestic money stock. That is, a long-run equilibrium relationship between those variables exists.

The coefficient of export duties is negative but not strongly significant and import duties are positive and statistically significant. The result indicates that export tariff worsen trade balance and import tariff improve trade balance in which case Ethiopia needs to protect to some extent even in the long-run until the primary agricultural export items become competitive in the world market. However, protection may not only through tariff and non-tariff but also through policy measures as change take time.

The coefficient of domestic money supply variable is negative and statistically significant. This implies that domestic money supply has an effect on trade balance. It should be noted, however, that the negative sign of the coefficient of the domestic money supply variable in the trade balance equation is consistent with the argument that an increase in domestic money supply would lead to an increase in the level of real balances. Now, if individuals perceive the rise in the level of real balances as a rise in their wealth, this will cause the level of expenditure to increase relative to income, resulting in the trade balance to deteriorate (Johnson, 1977).

With respect to the short-run estimates, estimations revealed a significant positive short-run relationship between the trade balance and import taxes as a share of real GDP while the other variables are not strongly significant. But, the error correction variable is strongly significant with appropriate sign which shows that short-run trade balance disequilibria are corrected to a speed of 68% per year.

Similarly short-run estimates of the current account balance shows that the variables that affect the current account balance in the short-run are the changes in the real effective exchange rate, the changes in money stock and the change in import taxes. This indicates devaluation of Ethiopian Birr worsen the current account balance in the short-run which exactly prove the hypothesis of this study and the need for protection to some extent current account balance in the short-run. The rest of the variables are insignificant. However, the error correction term is highly significant with the correct sign with a coefficient of (0.78), which indicates that adjustment to the equilibrium is quite fast.

In general sustainable development is a long-term process and as such needs to be examined with care. Development implies structural changes of many different types, ranging from purely economic aspects to those affecting the personal circumstances of people. Changes take time, all the more so when dealing with trade liberalization and structural change in the economic composition of output, as well as in the habits and norms that regulate consumption and saving patterns. Thus, Ethiopia should deal with a long-term process, in which the evolution of the process itself and the initial conditions are of extreme importance. Here lies one of the advantages in tackling development from the point of view of a historian of economic persuasion. Although there may also be disadvantages, one certainly learns how to keep a close watch on the need to consider a long-run impact of trade liberalization.

5.2. RECOMMENDATIONS

(For Ethiopia, the main objectives of trade integration to the global economy is to exploit the opportunities to transform its economy from a largely a peasant agricultural economy to a modern economy, and to improve external deficit.) There are three aspects to this transformation: from a subsistence peasant agriculture to a market based agriculture, from a past centralized command economy to a market economy and from a more inward oriented to an outward oriented trade regime. Thus, trade is one aspect of the transformation and a means to it, rather than an end itself. For Ethiopia, a country with a large and diverse resource base and potential, greater participation in world trade would provide additional ^{good} opportunities to transform its resources to address the challenging issues of economic growth and poverty reduction through time.

Even if external trade liberalization attempt made by Ethiopian government, the trade and current account balance deficit worsen during the period under study which shows that Ethiopia must has something to sell before she open her economies in to undifferentiated and indiscriminate competition from abroad.

Basically, the problem is one of the domestic supply conditions of primary agricultural products on the one hand and of the world market on the other, where demand related factors partially determines the level of earning. The supply side problem can be considered in its general term as an institutional problem which basically includes lack of research and development, poor development of infrastructure facilities, traditional attitude of the people involved in the activity, ethnics and society's value system and poor domestic markets, which have been along stayed bottleneck, and the policy constraints are some of the major internal problem of the country which needs a critical awareness in the future so as to support liberalization and improve external deficit.

The external problems are those beyond the control of the country. The demand for primary goods and raw materials is both price and income inelastic which has an adverse effect on the export expansion of agricultural primary commodities. Further more, technological progress in developed countries has been successful in substituting raw materials like hides and skins by synthetic products, which reduce the demand for these commodities in the importing countries. Thus trade liberalization requires the building up of an efficient developmental infrastructure to be able to compete in the global market as well as in the home market. To this end the following measure may be recommended:-

- Ethiopia should consider major changes in the regulatory environment in order to create a better perception among foreign investors and address issues such as well-developed infrastructures and the lengthy bureaucratic approval processes.
- Export development issues have to be addressed as a package by addressing other constraints such as limited bank lending for the purpose, legal problems involving the use of land-use rights for collateral among others. With respect to long term capital the private sector has almost no source of term borrowing. There is need for financial sector reforms that improve the financial market and policy making in that area to allow long term lending to take place.
- Access to trade related information needs to be improved and number of trained Ministry of Trade and Industry staff needs to be increased to tackle market information problems.

- Given the importance of agriculture in the economy, raising agriculture productivity in terms of technology there is need to develop ecologically suitable and crop specific packages of extension services, fertilizer and related inputs so as to increase the quality and quantities of export items.
- Development of a more efficient sanitary system, consisting in the establishment of an enabling environment for private animal health providers, the promotion of effective public-private partnership in disease control, and the development of adequate quarantine and disease-free zones for export of livestock and livestock products should be implemented so as to exploit huge potential of this sub-sector.
- Empowering of the main export and trade organizations, involved in livestock, meat and semi-processed hides and skins, so that they would become more effective participants in the improvement of the quality of the products (in particular in hides and skins) and in international and bilateral discussions on market access.
- To tackle the rapid fashion change, the existing plants should be upgraded and expanded more ever intensive information regarding the behavior of consumers in the importing countries should be communicated and both the state and private sectors need to make a joint effort in acquiring and exchanging technology and market information from foreign sources.
- Policy makers should make an in-depth study about external imbalance management, the macroeconomic impact of debt as well as strategies to get out of aid dependency and make the benefit of trade liberalization sustainable. That is, there is a need for implementing the appropriate exchange rate, fiscal and monetary policies during the liberalization process.

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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 sources of material used for the thesis have been duly acknowledged.

Declared by

BAYISA CHALA

Student

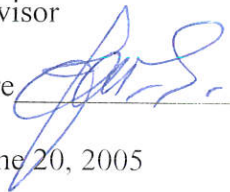
Signature  _____

Date: June 20, 2005

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Dr. GIRMA ESTIPHANOS

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Date: June 20, 2005

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