

FOREIGN CURRENCY SHORTAGE IN ETHIOPIA AND ITS IMPLICATIONS FOR IMPORTS

**A Thesis Submitted to the School of Graduate Studies of Addis Ababa University in
Partial Fulfillment of the Requirements for the Degree of Master of Science in
Accounting and Finance.**

BY

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**March 2021
ADDIS ABABA, ETHIOPIA**

DECLARATION

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

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CERTIFICATION

This is to certify that Yordanos Tesfaye has carried out her research work on the topic entitled “Foreign Currency Shortage in Ethiopia and its Implications for imports”. The work is original and is suitable for the submission for the reward of an MSC Degree in Accounting and Finance.

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Place and date of submission: Addis Ababa University, March 2021

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Foreign Currency Shortage in Ethiopia and its Implications for imports

**By
Yordanos Tesfaye**

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ACKNOWLEDGEMENT

First, I want to extend unreserved thanks and praise to the Almighty God.

Secondly, this thesis would not have been possible without the help, support, and patience of my advisor and supervisor, Wollela A. (Ph.D.) and I would like to express my deepest gratitude to the employees and management of Awash Bank, Dashen Bank, Wegagen bank, NIB international Bank, Hibret Bank, Bank of Abyssiniya, Enat Bank, Addis International Bank, Debub Global Bank, Birhan international Bank, Bunna International Bank, Lion International Bank, Oromiya International Bank, Cooperative Bank of Oromiya, Abay Bank and Zemen bank for their support and cooperation in providing me with the necessary information. I am most grateful to the Directors of the above sixteen Banks under study, for their attention, support, and patience and in providing concrete data and the overall image of foreign currency within their respective Banks and I would like to express my deepest appreciation to Mr. Delelegn Sharew for helping me with the quantitative aspect of the study.

Last, but by no means least, I thank my family and friends for their unreserved advice and support and all my colleagues for their support and encouragement throughout the course.

For any errors or inadequacies that may remain in this work, of course, the responsibility is entirely my own.

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ABBREVIATIONS

CPI =	Consumer Price Index
FCY =	Foreign Currency
FOREX=	Foreign Exchange
GDP =	Gross Domestic Product
GTP =	Growth and Transformation Plan
IMF =	International Monetary Fund
KII =	Key Informants Interview
MOR=	Ministry of Revenue
NBE =	National Bank of Ethiopia
UNCTAD=	United Nations Conference on Trade and Development

ABSTRACT

This thesis aims to investigate foreign currency shortage and its implication to the import sector. Specifically, the thesis examines the impact of foreign currency reserve, inflation, depreciation in the value of US dollar, Gross Domestic Product, Remittance and foreign debt on import. The study is conducted using a mixed research approach. The Quantitative data were collected from 34 years of import and export data from the National Bank of Ethiopia, World Bank, and Ministry of Revenues on the other hand the qualitative data is collected from the interview of the importers and higher officials of sixteen private commercial bank. Generally, the regression results of both long-run models mostly suggest that the fluctuations of real exchange rates are predominantly responses to monetary policy shocks rather than fiscal policy shocks. Furthermore, the result from the interview showed that there is an acute shortage of foreign currency caused mainly by the slow growth of the export as compared to imports of the country followed by brisk expansion of black-market foreign exchange, low flow of remittances via the formal market, increase in government imports in line with the huge infrastructure projects being undertakings. Based on the result of the study, enhancing the export and remittance, parallel support for the manufacturing sector producing export and import substitute items, and minimize black market foreign exchange are among the recommendation by the researcher.

Keywords: Foreign currency, Imports, Export, implication

CHAPTER ONE

INTRODUCTION

1.1. Background

Import is important to economic growth and development because it affects productions, which in turn constitutes the source of expansion in any economy. In recent decades, globalization and integration into the global value chains have contributed to the use of imported inputs in production. The strengthening of multinational companies, the development of communication and transportation tools, and easier access to cheaper and better quality products have accelerated the flow of goods (Gul, 2019). The motivation for a country to import goods and services varies from one country to another. The motives include: to produce goods and services required for the wellbeing of the citizenry; to bridge the assembly gap for goods that can be produced locally; and raw materials for industrial usage. Most significantly, in conformity with the comparative advantage, countries tend to import goods that cannot be produced efficiently, while others are for fiscal reasons to boost government income for a developmental purpose (Englama, 2013).

Firms everywhere the globe are now inevitably connected through input linkages in the production of products for domestic use and exports, a phenomenon called vertical specialization in international trade (Gul, 2019). Small countries tend to be more dependent on international trade than larger ones because they are less able to produce all that they need larger countries (in terms of population) import less manufactured goods on a per capita basis because such countries tend to possess a diversified economy that permits them to produce most of their own needs (Seyoum, 2009).

Foreign currency is a currency other than a country's own currency (Reda, 2016).

Foreign currency means any currency apart from Ethiopia on which the National Bank of Ethiopia has declared to be accepted for payment in Ethiopia. Foreign exchange also means any foreign currency, cheques, bills of exchange, promissory notes, drafts, securities, and other negotiable instruments expressed in foreign currency furthermore bank balances in an account held in foreign currency or asset in the form of foreign account crediting or set-off arrangements, expressed or payable in foreign currencies provided they are acceptable by the National Bank. (Ethiopia, 2017).

Foreign currency reserves are an integral part of a country's self-insurance. Countries hold a reasonable level of foreign currency reserve to import fuel and pharmaceuticals. This is especially so in low-income countries, where the government usually provides insurance against foreign currency shortages (Schanz, 2019). It provides recognition for the express variation from country to country looking at the economic state of affairs (Boru, 2015). Therefore excessive importation of products and services has serious implications for macroeconomic stability through imported inflation, drains foreign exchange reserves, worsens the balance of payment position, and also the country features a negative balance of trade (BOT), also called a trade deficit (Englama, 2013).

Most manufacturing plants in Ethiopia are highly obsessed with imported raw materials. Hence lack of foreign currency encompasses a direct interruption on the manufacturing processes which further results in sacking employees and aggravating the problem of unemployment (Bezabih, 2016). Periodic foreign exchange shortages due to weak export performance and high demand for foreign currency continued to present significant market challenges (Marin, 1992).

Mostly the reason for the scarcity of foreign currency is the start of various projects for the component of the development strategy of GOE. The projects are highly capital intensive and therefore the government went through huge foreign loan contracts to finance these projects which threaten the country's future paying capability given that most of the projects don't help generate foreign currency. As a developmental partner, the bank is expected to cover future project costs out of its international trade operation which becomes the other cause for the shortage of foreign currency. (Bezabih, 2016)

The objective of this thesis is, therefore, to assess the Foreign Currency shortage and its Implications for imports. The remaining discussion in this chapter is structured in seven sections. The primary section deals with the background of the study. The statement of the problem that motivates the researcher to conduct this study is that the second section. Thirdly, the general objectives of the study stated and research questions. Subsequently, the fourth section presents the significance of the study. The sixth and seventh sections deal with the scope and limitations, and structure of the study.

1.2. Statement of the problem

Within the past ten years, Ethiopia's economy grew at a quicker rate than the other state. However, the economy continues to be heavily dependent on the agricultural sector while not a structural shift towards different activities. Because of the huge enlargement of the infrastructure and economic process within the country for the last decade, imports have redoubled dramatically however exports are stagnant. The increasing gap between imports and exports indicates that Ethiopia's economy features a deficit. (Kayamo, 2019)

However foreign investors and native businesses complain that the hard currency shortages are stifling the private sector. Ethiopia is progressively affected by cash shortages and business is brisk for illegal exchange brokers. High economic growth in Ethiopia, but the inland countries of one hundred million individuals are heavily dependent on imports according to the international monetary fund (IMF, 2020).

There are now large backlogs of foreign currency orders in commercial banks. The foreign currency position of banks is extremely illiquid and most banks unable to always serve foreign currency requests that ought to be served on demand. The shortages of foreign currency and delays in receiving imports are crippling segments of the private sector, retailers, wholesalers, import-substituting manufacturers (Teshome, 2018). This in particular left commercial Banks in a position to battle amongst one another for the rest minimal amount of foreign currency, disabling them from meeting plans/budgets projected with the hope of realizing satisfactory profit to remain competent in this volatile Banking industry (Tadesse, 2018).

In general, it needs additional empirical literature to understand how the foreign currency shortage affects the import sector in Ethiopia because in recent times shortage of foreign currency popular phenomenon and affects imports heavily. Therefore, this study provides extra empirical items by analyzing the impact of the foreign currency shortage on imports.

1.3. Broad Research objectives, specific research questions, and hypothesis

The general objective of this study was to assess the Foreign Currency shortage and its Implications for imports.

Based on this broad objective, the following specific research questions (RQ) are developed

RQ1. *How is the trend in the gap between demand for and supply of foreign currency in Ethiopia?*

RQ2. *What are the main sources of foreign exchange supply in Ethiopia?*

RQ3. *What measures and practices importers take in mitigating foreign exchange shortages?*

HP. *There is a relationship between import and foreign currency reserve, inflation, depreciation in the value of US dollar, Gross Domestic Product, Foreign Debt and, Remittance.*

1.4. Significance of the study

The significance of this study is to add knowledge on what is already known as the level of foreign currency shortage and implications for imports. Hence, this study differs from the previous studies that focus on the implication of the foreign exchange shortage with a specific focus on the import sector of the country. We believe that this study valuable source for further studies related to this area and narrow the existing gap in the literature in the country.

1.5. Scope and limitation of the study

The study was examined on foreign currency impact on the Ethiopian import sector for the period (1985-2019) that was fast growth in the economy (Kayamo, 2019) thoroughly reviewed to complement the qualitative data of three research question and hypothesis, in-depth interview was conducted with importers, officials of NBE and sixteen private commercial banks in Ethiopia also document analysis. The magnitude and diversification of foreign currency of the government banks are quite different from the private banks. The volume of their business and other privileges like financing sources to which private banks have no access may help government banks to be in a better position about sensitivity to a shortage of foreign currency. Because of this immense capacity, the impact of foreign currency shortage for customers (importers) of government banks might not as visible as the private banks. Hence, from government banks, the commercial bank of Ethiopia is excluded from the sample because of the reason explained above and we have tried to obtain primary data on the demand and supply of foreign currency, major sources of foreign currency, and measures and practices importers take

in mitigating foreign exchange shortage from the importers and banks. The limitation of this study will be unpublished documents of banks most of the time treated as confidential. It is a challenge to get the unpublished documents, annual and strategy plan documents. It was so difficult to gather sufficient information due to limited prior research works regarding foreign currency shortage for imports in the Ethiopian context. All these problems was factors of the study.

1.6. Organization of the Study

The research paper is organized into five chapters. The first chapter starts by giving a brief introduction to the foreign currency shortage and followed by a brief statement of the problem. It also includes the objectives, research question, significance of the study, and the scope and limitation of the study.

The second chapter focuses on exploring various literature on the problem under study to provide definitions to the various concepts as well as explain the theoretical perspectives and conceptual framework.

The third chapter states that the methodology of the study. It covers research design, data type, and source, sampling method, and size, data collection procedures method of data collection and analysis of the study.

The fourth chapter covers the result and discussion of the study and the last chapter provides the conclusion and recommendation of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The previous chapter stated the main research questions and objectives addressed in this study. This chapter presents a related literature review. The chapter contains a review of theoretical literature on foreign currency shortage in Ethiopia and its implication on imports, empirical literature review on foreign currency shortage, imports, and related issues finally concluding remarks on the review of the literature and identifies the knowledge gap that has been addressed in the study.

2.1. Theoretical Literature

International trade is that the exchange of products and services across national boundaries (Nelson, 2009). It is the most traditional type of international business activity and has played a significant role in shaping world history. It is also the primary kind of foreign business operation undertaken by most companies because importing or exporting requires the least commitment of, and risk to, the company's resources (Seyoum, 2009). It has been argued that it plays a prominent role in promoting economic growth and productivity specifically, and debates are ongoing since several decades ago. Historical validation has revealed that internationally active countries tend to be more productive than countries that only produce for the domestic market (Adejare, 2013).

Imports and exports are the components of international trade. An import is a good or service bought in one country that was produced in another (Segal, 2020). According to (Amadeo, 2020) imports are foreign goods and services bought by citizens, businesses, and therefore the government of another country. It doesn't matter what the imports are or how they're sent. They can be shipped, sent by email, or even hand-carried in personal luggage on a plane. If they are produced in a foreign country and sold to domestic residents, they're imports.

Foreign exchange or FOREX is that the conversion of one countries currency into another. In a free economy, a country's currency is valued in step with the laws of supply and demand. In other words, a country's value can be pegged to another countries currency, such as the U.S.

dollar, or even to a basket of currencies. A country's currency value may additionally be set by the country's government (Lioudis, 2019).

2.1.1. Major sources of Supply of Foreign Exchange

The supply (inflow) of foreign exchange comes from those people that receive it due to the following reasons.

Exports are the merchandise individuals or nations sell (Nelson, 2009). It is incredibly important to modern economies because they provide people and firms with more markets for their goods. Companies export products and services for a variety of reasons. Exports can increase sales and profits if the products create new markets or expand existing ones, and that they may even present a chance to capture significant global market share. Companies that export spread business risk by diversifying into multiple markets. Exporting into foreign markets can often reduce per-unit costs by expanding operations to fulfill increased demand. Finally, companies that export into foreign markets gain new knowledge, experience, and foreign currency that may allow the invention of new technologies, marketing practices, and insights into a foreign competitor (Segal, 2020).

Remittance is the spectacular rise in private inflows in recent years was driven by foreign direct investment (FDI) and current private transfers, mainly remittances (Kinda, 2010). For any developing country, remittances can be a critical tool, assisting not only with local, grass-roots development but also contributing significantly to a country's entire economic health. (Tzema, 1999). Remittances are person-to-person flows, well-targeted to the requirements of the recipients, who are often poor and don't typically suffer from the governance problems that may be related to official aid flows. Fundamentally, Remittances, the portion of international migrant workers earnings sent back from the country of employment to the country of origin, play a central role within the economies of the many labor-sending countries and become a focal point in the ongoing debate concerning the costs and benefits of international migration for employment (Tzema, 1999). They should not be taxed or directed to specific development uses. Instead, the development community should make remittance services cheaper and more convenient, and support the development of instruments for these remittances to be leveraged for improving financial access of migrants, their beneficiaries, and also the financial intermediaries

within the origin countries. (Mohapatra, 2007). In part, remittances can build foreign currency reserves, address the balance of payments deficits, and enable investment in projects involving infrastructure, health, sanitation, and education.

The benefits of remittances for development are, however, conditional upon the broader economic and political context. This background paper reviews the recent country experiences on the impact of remittances on poverty, growth, real wages, and external competitiveness, and provides available policy options for developing countries to deal with the consequences of large and chronic remittance inflows. It also discusses how developing countries can leverage remittances for improving their access to international capital markets. Unlike private capital flows, remittances tend to raise when the recipient economy suffers an economic downturn following a financial crisis, natural disaster, or political conflict (Mohapatra, 2007).

A favorable economic and investment climate, characterized by solid growth, moderate inflation, and sound infrastructure, facilitates productive activities that attract foreign investment. The factors driving the surge in remittances are more complex. The significant increase may be due to changes within the host or home country economy, reductions in transfer fees, or simply better-quality data (Kinda, 2010) cited Dorsey et al., 2008.

Remittances reduce poverty, smooth consumption, affect labor supply, provide working capital, and have multiplier effects through increased household spending. Anecdotal evidence suggests that the majority of often women head the recipient households. One reason remittances have attracted attention is that they are seen as more stable than other foreign currency flows to developing countries (Wagh, 2007).

Remittances are also often used for small business investments, especially in countries with a good investment climate. To the extent that they finance education and health and increase investment, remittances could have a positive effect on economic growth. In economies where the financial system is underdeveloped, remittances may alleviate credit constraints and act as a substitute for financial development. On the other hand, a large outflow of workers (especially skilled workers) can reduce growth in countries of origin. Remittances may be more effective in a good policy environment. For instance, a good investment climate with well-developed

financial systems and sound institutions is probably going to imply that a higher share of remittances is invested in physical and human capital (Mohapatra, 2007).

Foreign Aid is the aid of money, goods, or services from one country to another. Such donations can be made for a humanitarian, altruistic purpose, or to advance the national interests of the giving nation (Murshed, 2014). It is the contribution from developed countries to developing countries to fill the growing gap between the developed and developing countries and this gap has led to constant capital inflow from the developed countries to those in the Third World including Africa; to help them overcome their problems and reduce the gap. However, there's evidence that decades of foreign aid have done little in changing the destinies of the many African states, most of which are currently experiencing low growth rates (Andrews, 2009).

Foreign aid can relieve credit shortages faced by the governments. Recipient countries use resources obtained from foreign aid to cover the “saving gap” and “the foreign exchange gap (Ayhan, 2018). Different types of aid might affect growth in numerous ways. Emergency and humanitarian aid are probably going to be negatively related to growth since aid tends to increase sharply at the identical time growth falls following an economic shock. In the case of aid for health, education, and also the environment, aid might only affect growth after a long lag, if at all. Aid for building roads, ports, and other infrastructure or supporting agriculture may have a direct positive effect on growth (Garonna, 2007).

Foreign debt

As the economy experienced a fiscal deficit can finance the general public deficit by borrowing domestically from a private sector through a financial organization or from other international sources. Due to the lack of a strong private sector and well-established banking industry, the amount of money domestically available is very insignificant. Despite this and other reasons, many poor countries borrow extensively from international lenders and other external sources (Ejigayehu, 2013). The rate at which nations borrow abroad depends on the links among foreign and domestic saving, investment, and economic growth (Gabriel, 2019).

Because most low-income countries don't have access to international capital markets, the impact of external debt on growth can be different in low-income countries than in emerging market countries. Furthermore, the channels through which debt affects growth may differ, given

differences in the structure of the economy and also the public sector across these two country groups. Besides, low-income countries are usually net recipients of resource transfers from donors, even when debt service is high. Under these circumstances, the adverse effects of debt service on real activity are mitigated (Clements, 2003). In general, external debt may affect economic growth in two ways:-

A. Through the debt overhang effect:- a situation when an accumulated debt, discourages and overhang investment, mainly private investment; as private investors expect a rise in tax by the government to pay the accumulated debt.

B. Through debt crowding out effect, this is a situation when income from export is employed to pay the accumulated debt. This in turn may affect investment. External debt is that a part of the whole debt during a country that's owed to creditors outside the country. The debtors can be governments, corporations, or private households. (Ejigayehu, 2013).

A large number of heavily indebted poor countries (HIPC) are now receiving debt relief under the HIPC and enhanced HIPC Initiatives. This, in turn, has revived the debate over the impact of a high external debt burden on economic growth. Indeed, one of the principal motivations for debt-relief initiatives stems from the presumed deleterious impact of a heavy debt burden on per capita income growth (Clements, 2003).

Tourism

The definition of tourism depends upon many conditions and criteria. The reason is that there's not a standard definition among scientists lies within the nature of tourism and how it's viewed by individuals (Donyadideh, 2010). Tourism implies that an individual undertakes a journey: the journey may be for less than each day (day tripper/visitor); or it may be a journey within a national boundary, therefore constituting a domestic tourist trip; or it might be a journey which crosses an international boundary, therefore being classified as an international tourism trip (Carson, 1997). Tourism has become more than just another industry; it's developed into an important part of the economic fabric of the many communities, regions, and countries. Tourism activities have historically demonstrated a general upward trend in numbers of participants and revenues. Tourism is one of few industries that's sensitive to economic ups and downs, and yet at the identical time rebounds quickly from any negative economic conditions or other

environmental impacts. Even within the face of a dramatic credit crunch, an economic slump, and political uncertainty, the impact on international tourism was not as severe as the downturn experienced in foreign trade and industrial production (Twain, n.d.). Negative impacts from tourism occur when the extent of visitor use is greater than the environment's ability to deal with this use within acceptable limits of change. Uncontrolled conventional tourism poses potential threats to several natural areas around the world. It can put enormous pressure on an area and lead to impacts such as soil erosion, increased pollution, discharges into the ocean; natural habitat loss increased pressure on endangered species and heightened vulnerability to forest fires. It often puts a strain on water resources, and it can force local populations to compete for the utilization of critical resources (Sunlu, 2003).

Speculation

Speculation is a venture based upon a calculation. The term speculation, however, is usually restricted to business of exceptional uncertainty. The UN initiated believes that chance is so large a part of speculation that it's subject to no rules is governed by laws (Watts, 2010). Speculators are short-term participants in financial markets focused on capital gains. Their valuation of a security depends on future price expectations which are sensitive to noisy information, higher-order expectations, and even recent price changes (Shinichi, 2018). To speculate in asset markets is to trade motivated exclusively by the likelihood of capital gains. It involves a belief, possibly divergent from the remainder of market participants, which leads the speculator to bet against them. It also involves a disposition to act based on that belief. To clarify the phenomenon of speculation, then, is to explain under what conditions we are likely to observe belief-based trading, and also how this trading activity changes market outcomes (Zurita, 1998).

Foreign direct investment

Growth theories suggest that economic growth emanates from expansion in an investment whose various financing components are domestic saving and foreign sources notably foreign capital inflows (Chanie, 2019). Investment is thought to be the engine of sustainable growth. However, in LDCs the national level of savings is quite low. Consequently, there exists a huge gap between the required rate of investment and also the existing rate of savings. Foreign direct investment (FDI) is stated to be a crucial source of capital formation, know-how, employment generation,

and trade opportunities for LDCs and called for accelerating FDI inflows into these countries. The classification of direct investment is based firstly on the direction of investment both for assets or liabilities; secondly, on the investment instrument used (shares, loans, etc.); and thirdly on the sector breakdown. (Espana, 2003).

FDI flows to less developing countries increased by almost 5% of GDP. However, FDI provides a much-needed resource to developing countries, such as capital, technology, managerial skill, entrepreneurial ability, brands, and access to markets. These are essential for developing countries to industrialize, develop and create jobs- attacking the poverty situation in their countries (Abeje, n.d.).

Receive gifts

Gift – a voluntary and irrevocable transfer of money, services, or property from an external donor for either unrestricted or restricted use. No commitment of resources or services is required other than the stated donor restrictions (Notredame, 2015).

A gift is the voluntary, non-reciprocal transfer of cash or property from a donor to an institution. The donor may be an individual, a corporation, or a non-profit organization. The donor doesn't expect anything of value in return other than recognition and doesn't have control over the expenditure of the funds. A gift may meet the interests of the donor and can be restricted or unrestricted. A restricted gift is a contribution designated for a selected purpose, program, or project. If the donor doesn't specify any restrictions, the gift is unrestricted and therefore the institution allocates the funds at its discretion. Only the Development Office may accept gifts on behalf of the University (WestGeorgia, 2015).

2.1.2. Major sources of demand or outflow of foreign exchange

The demand (or outflow) of foreign exchange comes from those who need it to make payment in foreign currency (Chand, n.d.).

Imports

Foreign Exchange is demanded to make the payment for imports of products and services. Imports are the products individuals or nations purchase (Nelson, 2009). Countries possibly

import goods or services that their domestic industries cannot produce as efficiently or cheaply as the exporting country and may also import raw materials or commodities that are not available within their border (Segal, 2020).

Payment of foreign loans and interest

The term loan refers to a kind of credit vehicle during which a sum of money is lent to another party in exchange for further repayment of the worth or the principal amount. In many cases, the lender also adds interest and/or finance charges to the principal value which the borrower must repay in addition to the principal balance (Kagan, 2020).

The document evidencing the debt (e.g., a promissory note) will normally specify, among other things, the principal amount of money borrowed, the rate the lender is charging, and therefore the date of repayment. A loan entails the reallocation of the subject asset(s) for a while, between the lender and also the borrower (Loan, 1936).

A loan is after you receive money from a friend, bank, or financial institution in exchange for future repayment of the principal (Turner, 2000). The interest provides an incentive for the lender to engage in the loan. In a legal loan, each of those obligations and restrictions is enforced by contract, which can also place the borrower under additional restrictions known as loan covenants. Although this article focuses on monetary loans, in practice, any material object may be lent (Loan, 1936).

As most of the foreign currency borrowing was UN hedged, it left the economies very exposed to a large rate of exchange depreciation (Junior, 2008). Attempts to stem the depreciation with massive will increase in interest rates unfold the matter to domestic currency borrowers. As a result of a lot of the foreign debt was short, it needed frequent rolling over. For instance, the share of debt with a maturity of but one year was over doubly as high in Thailand and Korea as within the average developing country (Turner, 2000). To pay loan and interest to the international organization need sufficient foreign currency.

Gifts and grants to the rest of the world

Both Grants and Donations are gifts. A grant/contract is an externally funded activity where there's an agreement representing the transfer of money or property from the sponsor in exchange for specific services, typically together with rights to and merchandise derived from the services, some formal monetary and/or technical coverage by the university on the particular use of money or property provided. The agreement is enforceable by law, and performance is typically accomplished during a specific time frame, with support being revocable for cause (Anon., n.d.).

The gift is property, money, or assets that one person transfers to another while receiving nothing or less than fair market value in return (Kagan, 2018). The terms gift and gifting are rarely formally defined but are related to something given without receiving payment, often within the expectation of reciprocation and of fixing the link with the recipient. There's no immediate trade of merchandise or service, but a gift may be given in the expectation of a return, of either a reciprocal gift or a benefit from giving, for example, if the giver is rewarded emotionally if the gift is well received (Gary, 2010).

Under certain circumstances, the IRS collects a tax on gifts. Transfer of cash or property that is given freely or exchanged for less than market value may be subject to the gift tax if the donor has exceeded the annual or lifetime gift exemption (Kagan, 2018).

Foreign investment across the world

Foreign direct investment (FDI) is defined as the ownership of assets in one country by the resident of another country (Bagchi-Sen, 2001). The "lasting interest" implies the existence of a long-term relationship between the direct investor and the direct investment enterprise (España, 2003).

Foreign investment involves capital flows from one country to another, granting the foreign investors extensive ownership stakes in domestic companies and assets. Foreign investment denotes that foreigners have an active role in management as a part of their investment or an equity stake large enough to enable the foreign investor to influence business strategy (Chen, 2020).

The classification of direct investment is based firstly on the direction of investment both for assets or liabilities; secondly, on the investment instrument used (shares, loans, etc.); and thirdly on the sector breakdown. (Espana, 2003).

Foreign exchange trade for speculation

Speculation can denote engagement during a risky business transaction or it can be synonymous with gambling; it is related to entrepreneurship or it can be a term of abuse; in economic thinking, there's similar ambiguity about the concept. Though speculation plays an important part in economic activity, its understanding has been a peripheral, specialist, and limited pursuit that has been restricted to explaining entrepreneurship, booms, and busts, and market bubbles (Hayward, 2013).

Farley(2019) an investor who purchases a speculative investment is probably going focused on price fluctuations. While the risk related to the investment is high, the investor is typically more concerned about generating a profit based on market value changes for that investment than on long-term investing. When speculative investing involves the acquisition of a foreign currency, it's referred to as currency speculation. During this scenario, an investor buys a currency to later sell that currency at an appreciated rate, as opposed to an investor who buys a currency to pay for an import or to finance a foreign investment.

Speculation in the foreign exchange market involves the buying and selling of currencies with the view of making a profit. It is called speculation due to the uncertainty involved as nobody can say for sure whether the markets are going to be up or down. Traders assess the likelihood of either scenario before placing a trade (Snow, 2019). Without the prospect of substantial gains, there would be little motivation to engage in speculation. It may sometimes be difficult to differentiate between speculation and simple investment, forcing the market player to consider whether speculation or investment depends on factors that measure the nature of the asset, expected duration of the holding period, and/or amount of leverage applied to the exposure (Farley, 2019).

In the world of finance, speculation, or speculative trading, refers to the act of conducting a financial transaction that has a substantial risk of losing value but also holds the expectation of a

significant gain or other major value. With speculation, the chance of loss is quite offset by the likelihood of a considerable gain or recompense (Farley, 2019).

Foreign tourism

Tourism is that the act and process of spending time far away from home in pursuit of recreation, relaxation, and pleasure while making use of the commercial provision of services (Walton, n.d.). The World Tourism Organization (WTO) defines tourism as ‘traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business, and other purposes. Foreign tourism has increased due to people around the world having more cash in their pocket, also because of the impact of greater globalization (Choudhary, 2017).

Foreign tourism activity is additionally characterized by a continued increase in geographical spread and diversification of tourist destinations and products. Although the majority of international tourism activity remains concentrated within the developed regions of Europe and the Americas, a substantial proliferation of recent tourist-receiving markets is also observed in the developing regions. International tourism has become one of the economic activities and a crucial source of foreign exchange earnings and employment in many developing countries. (Islamic, 2018).

Tourism is accountable for one in every ten jobs on the planet and global economies spend a lot of cash on boosting their tourist sector (Choudhary, 2017). Over the past few decades, international tourism activity has shown substantial and sustained growth in terms of both tourism revenues and the number of tourists and has left broad economic, social, cultural, and environmental footprints reaching almost every part of the globe. International tourism activity generates significant economic benefits to tourists host and residential countries alike (Islamic, 2018) Foreign exchange is required to satisfy expenditure incurred in foreign tours (Chand, n.d.).

2.1.3. Factors that determine the level of import in the country

2.1.3.1. Foreign exchange rate

An exchange rate is a rate at which a country's currency can be exchanged for the currency of another country. It is a vital monetary policy instrument that has its impact on macroeconomic variables such as; trade gap, inflation, economic growth, debt servicing, and therefore the like (Labata, 2019). The exchange rate affects the competitiveness of the commodities that a country exports (Genemo, 2017).

The exchange rate, which is believed to be a crucial macroeconomic indicator, has a significant role to play within the overall economy. Exchange rate movement does extensively influence various facets of an economy like the level of inflation, and import-export performance which in turn successively affects the general macroeconomic performance. To be precise, the exchange rate movement is like a double-edged sword. In the event of depreciation of the local currency, although the exporters are benefited it is detrimental for the importers and therefore the entities with borrowings denominated in foreign currencies. It also increases inflationary pressures which may negatively impact the economy (Ghosh, 2011).

The clear importance of the real exchange rate in economic activities has led to discussions regarding what form of exchange rate management is perfect for achieving and maintaining long-term growth (Akorli, 2017).

In recent times, most countries have adopted the managed-float regime, which allows their policymakers to intervene within the foreign exchange markets in periods of exchange rate uncertainty and trade imbalances. One such policy intervention for countries experiencing trade imbalances (in this case, deterioration within the trade balance) entails devaluing or depreciating the real exchange rate (Akorli, 2017).

Policies implemented to manage exchange rates are very crucial and important in achieving and sustaining long-term economic growth within economies. This had led to a lot of discussions about what optimal exchange rate policy is best to enable and sustain long-term economic growth. (Akorli, 2017). The way exchange rates affect the balance of trade, and also the current

account, has been an issue of fundamental importance for both academics and policymakers (Vural, 2016).

A fall in the countries exchange rate will lower export prices and raise import prices. This will be likely to increase the value of its exports and lower the amount spent on imports and vice versa (Chand, n.d.).

2.1.3.2. Inflation

Inflation is a general rise in prices within the economy is sometimes called inflation. Inflation is occurred due to some demand and supply-side factors. Inflation can be resulted due to supply shocks of various food items and worldwide oil prices. Rising oil prices always increase the prices of almost all other commodities for consumers. These supply shocks are volatile and make huge changes in food and oil prices (Kiani, 2011).

No country can keep itself away from the world markets. Developing nations with restricted markets and insufficient resources had to crate safe their goods and resources outside their boundaries. Because of the removal of trade barriers and access to the advanced markets, developing economies earned relatively higher national income and hence economic development (Yousaf, 2013).

Strict monetary policy with fiscal consolidation appears to have contributed to low price levels. The concern with inflation has not only to balance the whole macroeconomic situation but also from the fact that increase in inflation rates hurts the poor severely as their consumption basket becomes significantly decreased. The extensive survey of the International Monetary Fund, suggests that excessive credit growth in developing countries can have bad impacts on real variables. Increasing import prices is additionally a significant reason in enhancing inflation and during this scenario; the depreciating exchange rate can put upward pressure on prices (Kiani, 2011).

The overall price level may turn down due to direct and indirect price effects of cheaper imports of finished goods and intermediate inputs. The low-cost availability of imports will turn down the domestic price level directly. This effect depends on the share of imports within the economy and this share of imports increases as the economy becomes more open. Cheaper imports force

domestic producers to reduce their prices. The supply of cheaper imports, cheaper inputs, and foreign competition also reduce the cost of production and hence inflation (Yousaf, 2013).

As the competition increases there'll be faster domestic productivity growth and firms pay high wages without passing their cost within the kind of high prices. High inflation slows down the process of economic growth. It is believed that a reasonable and stable inflation rate boosts up the economic growth and hence the development process of a country. Moderate inflation increase return to savers enhances investment, and therefore, speeds up the economic growth of the country (Yousaf, 2013).

If the country has a relatively high rate of inflation, domestic households and firms are likely to shop for a major number of imports. The countries' firms are also likely to experience some difficulty in exporting. When weaker foreign exchange earnings and increased demand for imports further aggravate the foreign currency shortage thereby pushing the price of consumer goods (Reda, 2016).

2.1.3.3 Government restriction

The impact of the environments where the movement of global goods clearance time significantly affected timely getting of the products from the purpose of production to their final consumers (Krishna, 2019) cited (Martincus, 2013). The World Customs Organization (WCO) defines Customs as "the government service which is liable for the administration of Customs law and therefore the collection of import and export duties and taxes and which also has responsibility for the applying of other laws and regulations relating, inter alia, to the importation, transit, and exportation of goods (Ministry of Revenues, 2017). Among these environments, customs is that the most vital environment whose operation significantly impacts the clearance process of products entering and leaving the border of any country. Trade facilitation is aimed at ensuring the movement and clearance of the products that cross the borders among countries within minimum cost and time. The longer to process the facilitation of trade across the borders significantly slows the easy flow of border-crossing goods of imports and exports (Krishna, 2019) cited (Martincus, 2013).

Customs operations involve the administration of customs law relating to the importation, exportation, movement, or storage of goods and the collection of duties and taxes. In this regard, customs operations are a key factor for the trade facilitation and economic development of a country. For such a crucial sector to function soundly it should stand on principles that guide its course to worthwhile goals (Ministry of Revenues, 2017).

Customs is expected to satisfy the requirements of both the government and border crossing traders without compromising the balance between trade facilitation and control through maintaining regulations and laws that govern the movement of international goods (Krishna, 2019).

The time-release study scheme allows for the time measurement of all processes within the clearance procedures, including the intervention time taken by customs and other border control agencies and measuring the time of the involvement of logistic suppliers. The time required to release goods has also increasingly become the measure by which the international trading community assesses the effectiveness of the customs administration (Krishna, 2019).

The government controls the functioning of the private sector through its various policies and legislation. The factors which determine the regulatory environment are Industrial planning and policies, Tax structure and subsidies, Import controls, tariff and duties, Licensing system, Policy regarding Foreign Direct Investment (FDI), Policy decisions on joint ventures and foreign collaborations. Trade barriers also affect the balance of exports and imports for a given country. Policies that restrict imports or subsidize exports change the relative prices of these goods, making them more or less attractive to import or export. Nations that are insular and have restrictive trade policies, like high import tariffs and duties, may have larger trade deficits than countries with open trade policies since they may be shut out of export markets because of these impediments to free trade (Chand, n.d.).

2.1.3.4. Foreign Exchange Reserves

Foreign exchange (FX) reserves are an integral part of the policy toolkit as they insure against shocks and complement monetary policy to achieve price and financial stability. At the same time, building and holding FX reserves isn't without costs. To meet their main purposes, FX reserves must be invested in safe and liquid assets, where yields are low (Schanz, 2019).

In several countries, especially emerging market economies, the public sector has in recent years been accumulating sizeable cross-border financial assets, mainly within the form of official foreign exchange reserves. (International Relations Committee, 2006).

In a country with a fixed exchange rate and free cross-border capital flows, a large stock of reserves maybe required to maintain the desired exchange rate. In this case, reserves help limit foreign exchange rate risk as well as ensuring the availability of foreign currency to facilitate cross-border transactions (Reddell, 2012).

For an advanced country with a floating exchange rate, a much smaller stock of reserves is usually required. Intervention within the exchange markets is infrequent in these economies, and therefore the primary reasons for holding reserves may relate to the risk that extreme market disorder could compromise the functioning of the foreign exchange markets in ways in which create difficulties for their all economy of the financial system. Not all advanced floating exchange rate economies have a modest level of reserves, but most do (Reddell, 2012).

It is first and foremost crucial to analyze the nature of international trade to understand the importance that foreign currency reserves play in macroeconomics during a globalized world. Since exchanges of products and services, as well as financial instruments between nations or economic unions, don't happen by real exchange anymore and since every country or currency union possesses its currency, international trade involves the exchange of currencies in each and each transaction. From the above becomes clear that a country, or more precisely its residents, must hold a selected foreign currency, which is sought by a non-resident vendor of products, services, or financial instruments, to get them. Thus, if a country has enough reserves of these desired foreign currencies, it's ready to purchase without limitation. If, however, reserves are insufficient and earnings of these internationally desired currencies don't seem to be ready to cover for purchasing desires, a country cannot buy internationally limitlessly (Zurpel, 2014).

Thus, reserves need to be built to ensure coverage of all international import needs and desires. Foreign currency reserves are defined by the IMF as being those external assets that are readily available to and controlled by monetary authorities for meeting the balance of payments financing needs, for intervention in exchange markets to affect the currency exchange rate, and

for other related purposes (such as maintaining confidence within the currency and also the economy and serving as a basis for foreign borrowing) (Zurpel, 2014).

The foreign exchange quantity that a country needs is determined by the extent of the essence it created relative to its export. The worth of hard currencies is more dependent on the exchange rates that are applied thereon (Zurpel, 2014).

To compete effectively in extremely competitive international markets, a nation must have access to imported machinery that enhances productivity, which may be difficult if FOREX reserves are inadequate (Chand, n.d.).

2.1.3.5 Depreciation in the value of the US dollar

Devaluation can occur either in fixed or managed floating exchange rate regime and therefore the government has some rights over controlling the foreign exchange market whereas, depreciation occurs only in free-floating exchange rate regime and the government never decide about the value of a domestic currency, which is fully decided by the markets demand and supply interaction(Umer, 2015).

Currency depreciation may eventually achieve in improving the trade balance, the question arises whether or not they also sustain or even boost overall aggregate demand and growth. Indeed, the assumption that a devaluation is additionally an efficient tool for raising aggregate demand is wide-spread. Currency devaluations are often employed to reduce current account deficits. However, this analysis suggests that the effect of currency devaluation on aggregate demand and capital accumulation should be considered also to an indebted economy. Devaluation has distributional effects, which are likely to be regressive (Kohler, 2016).

There are two main implications of devaluation. First, devaluation makes the country's exports relatively more cost-effective for foreigners. Second, it makes foreign products relatively costlier for domestic importers. (Labata, 2019).

Currency depreciation, if orderly and gradual, improves a nation's export competitiveness and may improve its deficit over time. But abrupt and sizeable currency depreciation may scare foreign investors who fear the currency may fall further, and lead to them pulling portfolio

investments out of the country, putting further downward pressure on the currency (Smith, 2019).

2.1.3.6 GDP

Gross domestic product (GDP) is that the value of the products and services produced by the nation's economy less the worth of the products and services depleted in production. GDP measures the price of ultimate goods and services—that is, people who are bought by the ultimate user produced in a country in a given period. It counts all the output generated within the borders of a country. GDP is consists of products and services produced for sale within the market and also includes some nonmarket production, like defense or education services provided by the govt (Sheiner, 2018)Adhikari (2014).

The one important conceptual shortcoming of GDP as a measure of economic well-being that can't be resolved through series already within the standard national income accounts is GDP's exclusion of (most) non-market activities that make welfare for households. Trends within the importance of non-market activities could lead to a widening gap between household welfare and GDP specified changes in measured GDP might not proxy for changes in well-being over the longer run (Sheiner, 2018).

If incomes rise at home, more imports may be bought. Firms are likely to buy more raw materials and capital goods, and a few of those will come from abroad. Households will buy more products, and a few of those are imported. The increase in domestic income has had a positive impact on import demand but the depreciation of the real exchange rate has hurt the long-term dynamics of the import (Gachunga, 2018).

2.1.3.7. Foreign currency market and Availability of foreign exchange

The foreign exchange market is that the generic term for the worldwide institutions that exist to exchange or trade currencies. Foreign exchange is often referred to as "FOREX" or "FX.", which means that there is no central exchange and clearinghouse where orders are matched (Lien, 2008). Similar to the product's market, within the foreign exchange markets, the provision of foreign exchange from exports (which includes merchandise and services exports, foreign aid,

private transfers, and other transfers) plus foreign exchange net capital inflows (equal to the current account deficit) equals demand for foreign exchange from imports (Paul, 2009).

Foreign Exchange takes account of foreign currency outlines, demand for payments, and writings of credit, traveler's cheque with the intention of denominated and allocated in foreign currency (Yasir, 2014) The vast majority of FX trading is unregulated, in striking contrast to the extensive regulations in most equity and bond markets. Governments have learned through experience that dealers will simply move elsewhere if they're regulated (Rime, 2012).

The most important subdivision of foreign currency marketplace is spot market, onward in addition to futures marketplace with currency alternative marketplace. The applicants of foreign exchange marketplace are importers who do payment for goods through foreign currencies the exporters who take delivery in foreign currencies together with converting it to local currency (Yasir, 2014).

FX markets are subject to minimal regulation; they're also subject to minimal reporting requirements, which explain the scarcity of aggregate data on FX trading. Though equity trading volume could be a staple on the evening news, on any given day nobody knows how much was traded in FX markets, not the regulators, not the monetary authorities, not even the most important FX dealers (Rime, 2012).

The original FX market participants were traders in goods and services. Currencies came into existence because they solved the problem of the coincidence of wants with relation to goods. Most countries have their currencies so international trade in goods requires change currencies. The motives for currency exchange have expanded over the centuries to incorporate speculation, hedging, and arbitrage with the list of key players expanding accordingly. Beyond importers and exporters, the key categories of market participants now include asset managers, dealers, central banks, small individual (retail) traders, and – last (more recently) – high-frequency traders (King, 2012).

The foreign exchange accessibility could be a noticeable determinant of international trade on imports and exports profit era. The FOREX argument has received much attention within the context of a very high and dynamic international business market due to foreign exchange unavailability in most of the business participants (Kyanda, 2016). Other factors balance of

payment, recession, government debt, and speculation are described within the previous sections and also political stability and performance are factors affecting demand of import currently political stability in this country isn't a major issue due to this reasons I didn't describe in detail.

2.2. Empirical studies related to the foreign currency shortage

Based on the review of various literature several studies had been conducted on a matter associated with foreign currency shortage and negative balance of trade some related studies were conducted by different researchers in several parts of the world. However, there are limited numbers of studies conducted in Ethiopia associated with foreign currency shortage. Moreover, these studies focused on multiple variables like Foreign Direct Investment (FDI), Inflation, Gross Domestic Product (GDP), and Trade volume carried out. This study aims to assess the foreign currency shortage in Ethiopia and its implication for imports, the researcher tried to review different literature a number of the studies that were conducted on the other developing countries and Ethiopia. Some of the literature that was related to foreign currency shortage impact in Ethiopia for importers revised is written as follows,

Mekonnen(2010) studied The Balance of Payment-Constrained Economic Growth in Ethiopia. Import demand function was estimated for the same period so as estimate income elasticity; co-integration test between GDP and export was conducted using the Engel Granger two-step techniques and therefore the effect of liberalization on import income elasticity was incorporated into the analysis. The findings show that Ethiopia's economy was grown at a low rate as compared to the model's predicted growth rate. Achieving persistent and sustainable economic growth depends upon the strategies that relate to institutional and technological progress along with the other significant factors like sound infrastructure and continuity in policies.

Abbas(2013) conducted a study on the consequences of a deficit on the economy of Pakistan within which trade deficit is the independent and gross domestic product, foreign direct investment rate of exchange are the dependent variables. The researcher used histogram, scatter plot matrix, and also the correlations ordinary least square method of regression was used for the analysis. So its result shows if the government performing on these variables then trade deficit should automatically decrease like 2003 and 2004 during which the export is more as compared

to import .correlation coefficient of trade deficit with the gross domestic product, foreign direct investment, and the exchange rate had shown the moderate correlation except trade volume.

Shen(2013)specifically this study focused on the most reason for the Trade deficit in Tanzania by analyzing the impact of different variables. However, this study tried to use more variables that were rarely explored specifically in Tanzania and located out that the most influencing factors for the case of Tanzania are Foreign Direct Investment, Human Capital Development, Household Consumption Expenditure, Government Expenditure, Inflation, Natural Resources Availability, Foreign Income, and Trade Liberalization so suggested policy measures should focus on them to reduce the trade deficit in the Tanzanian economy.

Ali(2016) focused on the most reason behind the Trade deficit in Somalia by analyzing the impact of Foreign Direct Investment, exchange rate, and inflation rate. The study adopted the two-country imperfect substitute model of Rose and Yellen which analyses their relationship of the real exchange rate and the trade balance. Foreign direct investment hurt the trade balance in Somalia. The other factors include the exchange rate and inflation rate had no impact on the trade balance in Somalia.

Reda(2016) conducted on foreign currency shortage and its implication on the Ethiopian economy and tries to answer questions on how a foreign currency shortage affects the nation's economy generally and therefore the import sector specifically. The study used both primary and secondary data. A result from both the primary and secondary data was analyzed and presented in tables and figures. The findings from the study were showed that there is an acute shortage of foreign currency caused mainly by the slow growth of the export as compared to imports of the country followed by an increase in government imports in line with the huge infrastructure projects being undertakings. Based on the result of the study, enhancing the export and parallel support of the manufacturing sector producing export and import substitute items are among the recommendation by the researcher.

Rao(2016) they were tried to indicate that the impact of remittances on economic growth in Ethiopia. The researchers take the econometric procedure and therefore the autoregressive distributive lag model was used. In the long run, fixed capital formation, secondary school

enrollment, and total government expenditure had a positive and significant impact on economic growth, whereas remittances had a significant and negative effect on GDP within the long run.

Tadesse(2018)aimed to assess foreign currency mobilization on the performance of private commercial banks. To appreciate the objectives of the study the researcher was utilized a descriptive type of research approach gauged by qualitative analysis techniques, while a purposive form of sampling was employed in which the researcher contacted only the most relevant respondents. And as a recommendation the study has to be taken by private Banks which are giving more attention to the export sector, working with multiple numbers of remitting agencies, shaping their internal policies and procedures in line with the rules and regulations of the administration.

Even if the research was unable to find sufficient studies conducted on foreign currency shortage or related issues with a specific effect on the Ethiopian economy, many facts were assessed from local magazines, newspapers, periodicals, and reports of global organizations such as the IMF and World Bank.

As per the IMF(2020) report the amount of foreign currency shortage within the following detailed way. Ethiopia was sustained high economic growth over the last decade. Substantial progress on reducing poverty and improving social indicators had also noteworthy. In 2018/19, real gross domestic product (GDP) is estimated to possess grow by 9 percent, driven by manufacturing and services. However, the performance of product exports remained weak, and foreign exchange shortages persist. Policies appropriately targeted at containing public investment and debt contributed to an additional narrowing of the present account deficit to 4.5 percent of GDP and a reduction in public and publicly guaranteed debt to 57 percent of GDP. Inflation remained elevated in double digits, largely due to higher food prices, though non-food inflation had also trend upward. While revenues came in below target, cuts in expenditure contained the fiscal deficit to 2.5 percent of GDP, below budget.

2.3. Knowledge gap, Conceptual framework, and Conclusions to the literature review

Foreign currency shortage is a current issue for developing countries. The empirical studies that were reviewed within the preceding section focused on the various causes of foreign currency shortage and its impact on the economy.

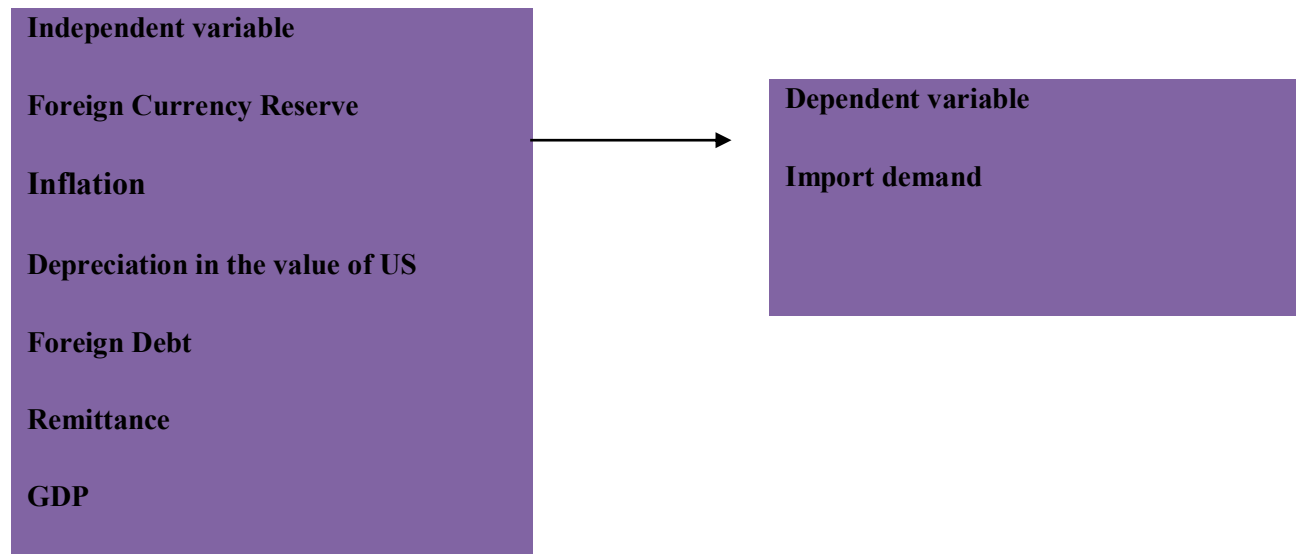
However, to the knowledge of the researcher, it is possible to conclude that although there was a limited number of studies on foreign currency impact for import sector both in developed and developing countries, Ethiopia particularly. In Ethiopia, the two exceptions regarding the shortage of foreign currency are the study by (Reda, 2016) and (Tadesse, 2018) which was reviewed in the preceding section. Even these studies failed to assess the impact of foreign currency shortage on the import sector thoroughly. The study by (Reda, 2016) was generalized about the impact on Ethiopia's economy, and therefore the data were collected only on the importer side. The study by (Tadesse, 2018) was specific to foreign currency mobilization on the private banks and did not consider the import sector. Both of those two studies did not comprehensively examine issues regarding foreign currency shortage on demand-supply, the main sources of foreign exchange, measures and practices importers go for mitigating foreign currency shortage and impacts of foreign currency shortage.

From the foregoing literature review, this study was developed the subsequent conceptual model within which to know understand issues regarding foreign currency shortage and import sector. The independent variables were studied in terms of factors affecting i.e. foreign exchange reserve, Inflation, Depreciation in the value of US, GDP, Foreign debt, and remittance. The dependent variable was studied in terms of demand for Imports. This implies that an increase in the foreign exchange reserve, Inflation, Depreciation in the value of the US, Foreign debt, and remittances expected to stimulate import demand while a rise in GDP is expected to reduce import demand.

A conceptual framework is a structure that the researcher believes can best explain the natural progression of the phenomenon to be studied (Dickson, 2018). From a statistical perspective; the conceptual framework describes the link between the most concepts of a study. It is arranged

during a logical structure to help provide an image or visual display of how ideas during a study relate to one another (Dickson, 2018).

Figure 2.1: a conceptual framework



Source: Developed by the researcher

Recent studies that have used the Import demand function were estimated for the same period so as estimate income elasticity; a co-integration test between GDP and export was conducted (Mekonnen, 2010) Abbas (2013) gross domestic product, foreign direct investment, the exchange rate had shown a moderate correlation except for trade volume. Foreign Direct Investment, Human Capital Development, Household Consumption Expenditure, Government Expenditure, Inflation, Natural Resources Availability, Real Exchange Rate and Foreign Income and Trade Liberalization (Shen, 2013) and that was included in this paper not included in the previous studies are depreciation on the value of US dollar, Remittance and Foreign debt because of their effect on Ethiopian economy and import sector are important.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

The previous section review both theoretical and empirical literature to see briefly the gap in the existing knowledge and this chapter presents the research design used in this study. The chapter is organized into three sections. The first section describes the research objective and questions as a means to connect the research questions to the particular research methodology adopted. In the second section, the theoretical nature of the three research approaches, their nature, and the conditions for each to be adopted in conducting research finally in the last section the specific research methods adopted with proper justification is explained.

3.1. Broad Research Objective, Specific Research Questions, and Hypothesis

The general objective of this study was to assess the Foreign Currency shortage and its Implications for imports.

Based on this broad objective, the following specific research questions (RQ) are developed

RQ1. *How is the trend in the gap between demand for and supply of foreign currency in Ethiopia?*

RQ2. *What are the main sources of foreign exchange supply in Ethiopia?*

RQ3. *What measures and practices importers take in mitigating foreign exchange shortages?*

In addition to the above research questions, based on the existing theoretical and empirical literature, as detailed below the study developed one research hypothesis

Foreign currency Reserve: reserves need to be built to ensure coverage of all international import needs and wishes. A country with a fixed exchange rate and free cross-border capital flows maybe require a large stock of reserves to maintain the desired exchange rate. In that case, reserves help limit foreign exchange rate risk as well as ensuring the availability of foreign currency to facilitate cross-border transactions (Reddell, 2012). If a country has enough reserves of those desired foreign currencies, it can purchase without limitation. If reserves are insufficient and earnings of those

internationally desired currencies are not able to cover for purchasing desires, a country cannot buy internationally limitlessly (Zurpel, 2014).

Depreciation in the value of the US dollar: There are two main implications of devaluation. First, devaluation makes the country's exports relatively less expensive for foreigners. Second, it makes foreign products relatively more expensive for domestic importers (Labata, 2019). Currency depreciation, if orderly and gradual, improves a nation's export competitiveness and may improve its trade deficit over time. But abrupt and sizeable currency depreciation may scare foreign investors who fear the currency may fall further and lead to them pulling portfolio investments out of the country, putting further downward pressure on the currency (Smith, 2019). If the depreciation in the value of the US dollar occurs the import demand will decrease because the price of imported good increase.

Foreign debt: As an economy that experienced a fiscal deficit can finance the public deficit by borrowing domestically from a private-sector financial institution or other international sources. Due to the lack of a strong private sector and well-established banking system, the amount of money domestically available is very insignificant. Despite this and other reasons, many poor countries borrow extensively from international lenders and other external sources (Ejigayehu, 2013).

Remittance is the spectacular rise in private inflows in recent years was driven by foreign direct investment (FDI) and current private transfers, mainly remittances (Kinda, 2010). For any developing country, remittances can be a critical tool, assisting not only with local, grass-roots development but also contributing significantly to a country's entire economic health. (Tzema, 1999).

Gross Domestic Product: If incomes rise at home, more imports may be bought. Firms are likely to buy more raw materials and capital goods, and some of these will come from abroad. Households will buy more products, and some of these will be imported. The rise in domestic demand may also encourage some domestic firms to switch from the foreign to the domestic market. If this does occur, exports will fall.

Inflation: If the country has a relatively high rate of inflation, domestic households and firms are likely to buy a significant number of imports. The countries' firms are also likely to experience some difficulty in exporting. When weaker foreign exchange earnings and increased demand for imports

further aggravate the foreign currency shortage by pushing the price of consumer goods (Reda, 2016).

There is a relationship between import and foreign currency reserve, inflation, depreciation in the value of US dollar, Gross Domestic Product, Foreign Debt and, Remittance.

3.2. Research Approaches

Research approaches are often divided into 3 types: Qualitative, Quantitative, and Mixed analysis approach. These approaches are different in terms of their philosophical assumptions as well as techniques used in data collection, analysis, and interpretation, and are discussed as follows:

Qualitative analysis is an associate degree approach for exploring and understanding that means people or teams assigned to a social or human drawback (Creswell, 2014). It is concerned with a qualitative phenomenon, i.e., relating to quality or variety (Aloke, 2017). It attempts to get an in-depth opinion from participants (Dawson, 2002). The method of analysis involves rising queries and procedures, information usually collected within the participant's setting, information analysis inductively building from particulars to general themes, and also creating interpretations of the information.

Quantitative analysis is an associate degree approach for testing objective theories by examining the link among variables (Creswell, 2014). These variables, in turn, are often measured, usually, on instruments, so numbered information is often analyzed by applied math procedures (Creswell, 2014). It is related to the object that can be expressed in terms of quantity or something that can be counted. Such types of research involve systematic experimental analysis of observable phenomenon via statistical, mathematical, or computational techniques in numerical form such as statistics, percentages, etc. whereas Qualitative research involves looking in-depth at non-numerical data. It is more naturalistic or anthropological (Aloke, 2017).

Mixed ways analysis is an associate degree approach to an inquiry involving assembling each quantitative and qualitative information, desegregation the two varieties of information, and distinct styles which will involve philosophical assumptions and theoretical frameworks (Creswell, 2014).

3.3. Research approach adopted

As discussed in the previous section the researcher use a mixed research approach for collecting and analyzing data needed to see how the shortage of foreign currency affects the performance of imports in Ethiopia and to spot different bottlenecks associated with the regulation of the point. There are different tools available to the researcher to collect the required data including trend analysis, interview, and document analysis. Therefore, in this research, both forms of data were collected at the same time during the study and integrates the information in the interpretation of the overall results and detail discussed in the following sub-sections.

3.3.1. Quantitative aspect: a structured review of records

This is because secondary data may guide researchers to design succeeding primary research and can also provide a baseline with which to compare the primary data collection results of a researcher (Cacciattolo, 2015). This paper in the quantitative aspect uses trend analysis and presents it in the next subsections.

3.3.1.1. Data Analysis

This study has been found to examine long-run and short-run relation between the study variables. Various quantitative data analysis statistical tools can be employed for the different data set in different researches based on the objectives set. For this study, the data analysis technique was determined by the nature of this study. In doing so, the quantitative data analysis tools incorporate determine the state of the specific research question and hypothesis. Besides, the data analysis techniques incorporate both descriptive statistics and econometric models.

Trend Analysis

Trend analysis including the trend of import and export in the country and the impact shortage of the foreign currency shortage on the import sector for the past 34 years (1986/87-2018/19) were collected from the NBE, World Bank, and Ministry of Revenues (MOR). This trend analysis was conducted to know the trend in demand and supply of foreign currency and the relationship between the dependent and independent variables.

Definition and Measurement of Variables

This section presents the definition and measurement of variables considered for this study. Measurement is a process of assigning numbers to some characteristics or variables or events according to scientific rules (Kabir, 2016).

Dependent Variable: In this study, the dependent variable is Import Demand. This variable was measured in terms of Cost, Insurance, and Freight (CIF) of import in thousands of birr obtained from the Ministry of Revenues (MOR).

Independent Variables: six independent variables were considered: Foreign Debt, Inflation, Remittance, Foreign Exchange Reserves, GDP, and Depreciation in the value of the US dollar.

Foreign Debt: it is defined that foreign Debt affects import demand. This variable is measured in terms of the average annual foreign Debt obtained from NBE and World Bank.

Inflation: it is a measure of the rate at which the average price level of a basket of selected goods and services in an economy increases this variable is measured in terms of the consumer price index (CPI) obtained from NBE.

Foreign Exchange Reserves it is defined that Foreign Exchange Reserves affect import demand. This variable was measured in terms of the average annual Foreign Exchange Reserves obtained from NBE.

Depreciation in the value of the US dollar is defined as Depreciation in the value of the US dollar that affects import demand. This variable was measured in terms of the average annual foreign exchange rate obtained from NBE.

GDP; is the monetary value of all finished goods and services made within a country during a specific period. This variable is measured in terms of the average annual GDP obtained from NBE.

Remittance is defined as that Remittance affects import demand. This variable was measured in terms of the average annual Remittance obtained from World Bank.

Model Specification

Many macro-economic variables analyzing *the impact of Foreign Currency Shortage in Ethiopia and its implications for Imports*, but in this particular study, six macro-economic variables are selected with the assumption that they may affect the dependent variable to great extent. As explained above, the selected explanatory variables are IM_d = Import Demand, FER : Foreign Exchange Reserves, $DVusD$: Depreciation in the value of the US dollar, $Fdbt$: Foreign debt, ReM : Remittance, INF : Inflation is determining the ratio of the sum of Monetary policy shock at time t to GDP.

$$IM_d = f(FER_t, DVusD_t, Fdbt_t, ReM_t, INF_t, Real\ GDP) \text{-----} (1)^1$$

The following theoretical model has been constructed and the mathematical relationship between the dependent variable and independent variables are expressed below. According to (Aljebrin, 2006) the theoretical model for this particular study is indicated below:

$$IM_d = FER^{\beta_1}, DVusD^{\beta_2}, Fdbt^{\beta_3}, ReM^{\beta_4}, INF^{\beta_5}, Real\ GDP^{\beta_6} \text{-----} (2)$$

This function can also be written in log form as follows:

$$\ln IM_d = \beta_0 + \beta_1 \ln FER + \beta_2 \ln DVusD + \beta_3 \ln Fdbt + \beta_4 \ln ReM + \beta_5 \ln INF + \beta_6 \ln Real\ GDP + \epsilon_t \text{---} (3).$$

Stationarity and Non-Stationarity of Time Series Data

Unit root test is used to test for the statistical properties of variables in time series analysis. Time series data are hardly stationary in level forms. Regression relating to non-stationary (i.e., variables that have no clear tendency to return to a constant value or linear trend) time series usually leads to the problem of spurious regression. This happens when the regression result tells a high and significant relationship among variables even if no relationship exists. Moreover, (Watson, 1988) have also revealed that the usual test statistics (t , F , DW , and R^2) cannot possess

¹All the variables transformed into log to avoid heteroscedasticity because according to (Gujarati, 2004), transforming variables into log helps to avoid heteroscedasticity and show elasticity of the variables. With the sources of Data, the annual time series data were collected from secondary source from 1986/87 to 2018/19. The data were collected principally from annual reports of NBE statistical bulletin, World Bank Group statistical reports and MOR.

standard distributions if some of the variables in the model have unit roots. The other vital condition for testing unit root test when we apply the ARDL model is to check whether the variables enter in the regression are not order two (i.e. $I(2)$), which is a precondition in the ARDL model. Most methods of non-stationary tests like the Augmented Dickey-Fuller (ADF) test, Phillips Perron (PP) test are used; for this particular study, applied both Augmented Dickey-Fuller (ADF) and Phillips Perron (PP) test to have more concrete information.

Stationery Test Result

These study tests were performed on all series, such as; IMd = Import Demand, FER: Foreign Exchange Reserves, DVusD: Depreciation in the value of the US dollar, Fdbt: Foreign debt, ReM: Remittance, INF: Inflation, and Real_GDP by using the Augmented Dickey-Fuller (1978) and Phillips-Peron (1988) tests.²

³The evidence of co-integration by both methods indicates the existence of a long-run relationship among the variables. Hence there is significance at the first level in both ADF and PP analysis; hence the data of the study are stationarity. We don't need to you all variable unit root test because; the optimal lag length that is obtained from the AIC is also confirmed by the VAR estimates considering successive lags (Jhingan, 2003). Therefore, the only dependent variable is important approving the stationery of dependent variable to independent variable at the first level by this implication, all critical value at 1%, 5%, and 10% are found to prove the critical value of ARDL if we don't use VAR.

²The results of Augmented Dickey fuller test and Phillips-Peron tests were applied to the variables mentioned in the model of this study ADF test is first level at difference level the H_0 accept or not reject the H_0 and PP tests is first level H_0 accept H_0 accept or not reject the H_0 so based on thus both test first guide line of the unit root test method. The stationery of dependent variable to independent variable at first level by this implication, all critical value at 1%, 5% and 10% are found proved the critical value of ARDL. The second guide line of the unit root test the total absolute value t- test value greater than each critical absolute value and final the third guide line of the unit root test all variables p value less than 5% and significant at all level.

³The dependent, constant and independent variable, thus the t statistics value obtained is compared with the critical value given at 1%, 5%, and 10%, and those indicated that the t -statistics values are greater than the critical values at 1%, 5%, and 10%. The P-values are also less than 5% which means it is significant, so the null hypothesis of no co-integration is rejected for the entire model

Table 3.1: Augmented Dickey-Fuller (ADF) Test Result

Null Hypothesis: IMD has a unit root

Exogenous: Constant

Lag Length: 1 (Automatic - based on SIC, maxlag=8)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	4.020496	1.0000
Test critical values: 1% level	-3.653730	
5% level	-2.957110	
10% level	-2.617434	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(IMD)

Method: Least Squares

Date: 01/24/21 Time: 03:09

Sample (adjusted): 3 34

Included observations: 32 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IMD (-1)	0.120470	0.029964	4.020496	0.0004
D(IMD (-1))	-0.568528	0.208537	-2.726265	0.0108
C	-0.012550	0.005928	-2.117026	0.0430

Significance level at 1%,5% & 10%**Table 3.2: Phillips-Perron test statistic**

Null Hypothesis: IMD has a unit root

Exogenous: Constant

Bandwidth: 19 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	7.594370	1.0000
Test critical values: 1% level	-3.646342	
5% level	-2.954021	
10% level	-2.615817	

*MacKinnon (1996) one-sided p-values.

Residual variance (no correction)

0.000109

HAC corrected variance (Bartlett kernel)

1.89E-05

Phillips-Perron Test Equation

Dependent Variable: D(IMD)

Method: Least Squares

Date: 01/24/21 Time: 03:16

Sample (adjusted): 2 34

Included observations: 33 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IMD (-1)	0.080941	0.029084	2.782971	0.0091
C	-0.008129	0.006153	-1.321087	0.1961

Significance level at 1%,5% & 10%**Source: Own the study from EViews 10, 2021**

ARDL Model Estimation

According to (Pesaran, 2003) the ARDL unrestricted error correction model using Ordinary Least Square (OLS). The orders of the lags in the ARDL Model are selected by either the Akaike information criterion (AIC) or the Schwarz Bayesian criterion (SBC) before the selected model is estimated by ordinary least squares (Gebbru, 2015). Variables under consideration of the appropriate statistic are for the Wald test (Pesaran, 2003) proposed for the bound test approach. For annual data (M. Hashem Pesaran, 1997) recommend a maximum of 4 lags. From this, the lag length that minimizes the Akaike information criterion (AIC) is selected.

Short-run Model of Estimation

Basically, according to (Pesaran, 2003), the ARDL approach to co-integration involves the estimation of the error correction model (ECM). So, we can estimate the short-run model based on the coefficient sign of the equation.

After the error correction term (ECT) is derived from the corresponding long-run model whose coefficients are obtained by normalizing the equation. After estimating the long run and short-run model the study conducted a normality test, serial correlation test heteroscedasticity test, and model specification test.

Autocorrelation Test Result

Autocorrelation is one of the basic assumptions in the linear regression model (LRM) is that the random error components or disturbances are identically and independently distributed. The Durbin-Watson (DW) statistic tests for first-order autocorrelation only. Also, it does not work properly if a dependent variable from a preceding time is used as an independent variable in the model; most econometric software programs calculate the Durbin-Watson statistic automatically. In this study, the Durbin-Watson test statistic value in Table 3.3 was 1.8222. Therefore, the relevant Durbin-Watson test statistic values in Table 3.3 the test are $dL = 0.748$, $dU = 1.8222$, i.e., for 34 observations and six variables excluding the constant term. Hence, $4 - dU = 41.814 = 2.36$; $4 - dL = 4 - 0.748 = 3.252$. The Durbin-Watson test statistic of 1.8222 is clearly between the upper limit (dU) which is 1.822 and the critical value of the upper limit which is 2.186 and thus the null hypothesis of no autocorrelation is within the non-rejection region of the number line all the variables.

Therefore, this study proved by Table 3.3 in the Durbin-Watson test. And more ever the R – squared in Table 3.3, equals 0.999; the study can be made that 99% of the variation in the dependent variable is explained by its regression on the independent variables. This means the explanatory variables are highly explained in the dependent variables; because in the regression model, most of the econometrics researchers’ proved that, a good regression models the R-squared is greater than 60 %. That is, it will increase as long as explanatory variables, regardless of their true significance.

Table 3.3: Regression result of Durbin-Watson Test

Dependent Variable: IMD			
Method: ARDL			
Date: 01/24/21 Time: 03:31			
Sample (adjusted): 4 34			
Included observations: 31 after adjustments			
Maximum dependent lags: 4 (Automatic selection)			
Model selection method: Akaike info criterion (AIC)			
Dynamic repressors’ (3 lags, automatic): FERT DVUSDT FDBTT REMT INFT			
Fixed repressors’: C			
Number of models evaluated: 4096			
Selected Model: ARDL (2, 3, 3, 3, 2, 3)			
Note: final equation sample is larger than selection sample			
R-squared	0.999396	Mean dependent var	0.214839
Adjusted R-squared	0.997987	S.D. dependent var	0.070752
S.E. of regression	0.003175	Akaike info criterion	-8.484631
Sum squared resid	9.07E-05	Schwarz criterion	-7.466962
Log-likelihood	153.5118	Hannan-Quinn criteria.	-8.152896
F-statistic	709.1124	Durbin-Watson stat	1.822242
Prob(F-statistic)	0.000000		
*Note: p-values and any subsequent tests do not account for selection.			

Source: Own the study from EViews 10, 2021

Diagnostic’s Test

The research has tested the basic econometric assumption as listed below.

A Normality Test

The test of residual normality is very important after estimation in empirical studies. Jarque-Bera(JB)test is an important residual normality test in this study. It is a joint asymptotic test and the test statistics are calculated from the skewness and kurtosis of the residuals.

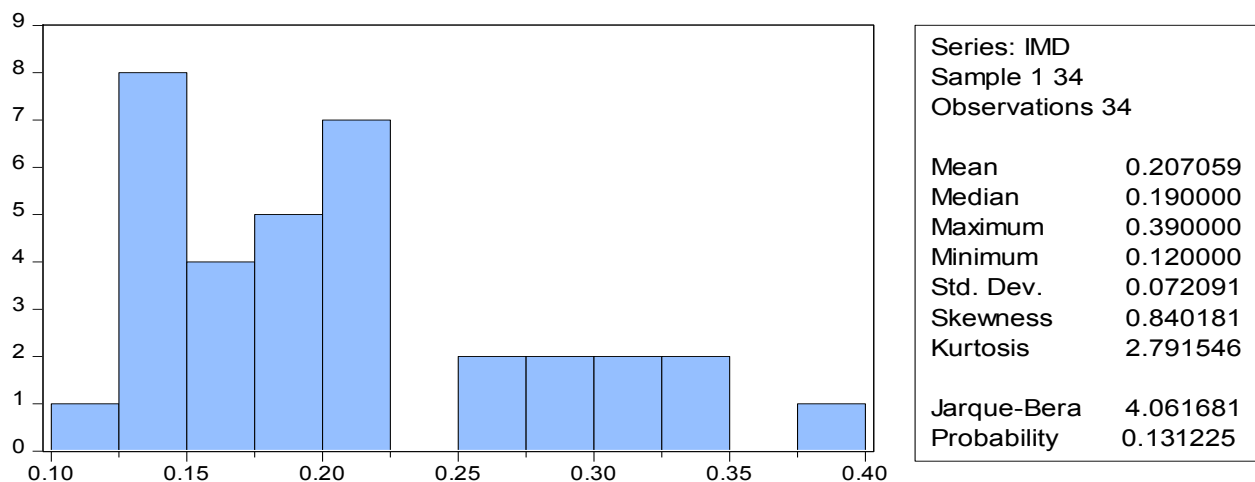
Normality Test Result

There are various normality tests available for the determination of the normality of data. In statistics, the normality tests are used to determine whether a given set of data is well-defined by a normal distribution. They are also used to measure how likely a set of data to be normally distributed for a random variable. In probability theory and statistics, the probability distributions are the set of probabilities assigned to all the possible outcomes for an event or a set of events.

In this study we show in Figure 3.1; on the right side looks like a bell-shaped normal distribution curve on the histogram, you will get some idea as to whether normal approximation may be appropriate. It is always a good practice to plot the histogram of the residuals as a rough and ready method of testing for the normality assumption.

The Jarque–Bera (JB) test is the goodness of fit of whether sample data have the skewness and kurtosis matching a normal distribution. Become our study 34 sample size observation and 6 variables including one dependent and constant variable we will show the left side Figure 3.1 and Jarque–Bera (JB) Test normality is an asymptotic, or large-sample, test. It is also based on the OLS residuals. This test first computes the skewness and kurtosis measures of the OLS residuals and uses the following test statistic:

Figure 3.1 Normality Test



Source: Own the study from EViews 10, 2021

b) Residual serial correlation Test

The test of serial correlation or autocorrelation of residuals is another means to check the strength of regression results. The Breusch-Godfrey Lagrange Multiplier (LM) test, which is a multivariate test for residual serial correlation will be employed in this study.

C) Heteroscedasticity Test

Heteroscedasticity an important assumption assumed by the classical linear regression model is that the error term should be homogeneous. Whenever that assumption is violated, then one can assume that heteroscedasticity has occurred in the data.

If the errors are correlated with one another, it would be stated that they are autocorrelated. This test is conducted to ascertain that the disturbance or the errors have the same variance such that OLS estimators are the best linear unbiased error (BLUE) that is the coefficient estimates are efficient, consistent, and unbiased.

Heteroscedasticity Test Result

To detect *heteroskedasticity*, different techniques can be used. The most common test used for this heteroscedasticity problem is the whites test that evaluates the heteroscedasticity of the residuals. The whitest of the null hypothesis indicates whether the residuals are homoscedastic or not.

Table 3.4: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.539208	Prob. F(21,9)	0.8830
Obs*R-squared	17.27196	Prob. Chi-Square (21)	0.6945
Scaled explained SS	1.388528	Prob. Chi-Square (21)	1.0000

Source: Own the study from EViews 10, 2021

Table 3.5: Heteroskedasticity Test: White

F-statistic	0.651208	Prob. F (21,9)	0.8003
Obs*R-squared	18.69591	Prob. Chi-Square (21)	0.6046
Scaled explained SS	1.503002	Prob. Chi-Square (21)	1.0000

Source: Own the study from EViews 10, 2021

In this study as shown in Tables 3.4 & 3.5, both the F-statistic and Chi-Square versions of the test statistic gave the same conclusion that there is no evidence for the presence of heteroscedasticity since the p-values were more than 0.05.

The third version of the test statistic scaled explained SS, also gave the same conclusion that there is no evidence for the presence of heteroscedasticity problem since the p-value was considerably more than 0.05 the common heteroscedasticity test are Breusch-Pagan-Godfrey and White tests approved this study.

d) Ramsey RESET tests:

Model specification test: This test is helped to test whether the model is correctly specified or not.

Model Stability

Stability tests the most common measurement was Ramsey RESET (Regression Equation Specification Error Test) test among the many “diagnostic tests” that econometricians routinely use, some variant or other of the RESET test is widely employed to test for a non-zero mean of the error term; that is, it tests implicitly whether a regression model is correctly specified in terms of the repressors that have been included.

The Ramsey RESET test was performed to find out the stability of the model. Ramsey RESET test was aimed at testing for specification errors or non-normality which violate the assumption that the disturbances are distributed $N(0, I)$. It tests for the omitted variables (that is; the vector of the repressors does not include all relevant variables), incorrect functional form, and the correlation between the dependent and independent variables.⁴

⁴Under such specification errors, Ordinary Least Squares estimators would be biased and inconsistent, and conventional inference procedures would be invalidated (Ramsey, 1969). The null hypothesis that the model is stable (H_0 : Model is stable) was tested against the alternative hypothesis of no stability in the model (H_1 : No stability in the model). If the probability F-statistic of the Ramsey RESET test statistic is significant at five Percent. The null hypothesis is rejected.

Table 3.6: Ramsey RESET Test

Ramsey RESET Test

Equation: UNTITLED

Specification: IMD IMD (-1) IMD(-2) FERT FERT(-1) FERT(-2) FERT(-3)

	Value	Df	Probability
t-statistic	1.134879	8	0.0002
F-statistic	0.0000	(1, 8)	00001
F-test summary:			
	Sum of Sq.	Df	Mean Squares
Test SSR	1.26E-05	1	1.26E-05
Restricted SSR	9.07E-05	9	1.01E-05
Unrestricted SSR	7.81E-05	8	9.77E-06

Source: Own the study from EViews 10, 2021

The results from the Ramsey RESET test are presented in appendix F and X2 versions of the test show that the functions are linear and are stable since the p-value of the dependent variable Table 3.6, is significant at 5%. So, using several fitted terms two our model was the probability F-statistic of the test (0.0000) is significant at five percent level. Therefore, based on this result we fail to reject the null hypothesis that the models are linear and stable.

3.3.2. Qualitative aspect: in-depth interview and documentary study

For this study, data is collected through in-depth interviews and documentary analysis. The following discussions present the in-depth interview and using document study.

In-depth interviews: In-depth interview was conducted with the person engaged in the import business, with officials in the NBE, and sixteen private commercial banks international banking department, or trade finance senior officials to address the three research questions and hypothesis of the study. Awash Bank, Dashen Bank, Wegagen bank, NIB international Bank, Hibret Bank, Bank of Abyssiniya, Enat Bank, Addis International Bank, Debub Global Bank, Birhan international Bank, Bunna International Bank, Lion International Bank, Oromiya International Bank, Cooperative Bank of Oromiya, Abay Bank and Zemen bank Used different data sources allowed the researcher to make valid conclusions and recommendations to improve the shortage of foreign exchange and impacts on the business importers are engaged in. To help to hold experienced or concerned respondents, purposive sampling is used. In such type of sampling, it is not possible to specify the possibility of one person being included in the sample.

Interview conducted with 50 participants Face-to-Face and Telephone Interview due to Covid 19. On the interview sessions, the author allowed some degree of flexibility for the pursuit of an unexpected line of inquiry. In analyzing the data from interviews, narrative approaches were used.

Document study: In addition to the data obtained through other methods, this study employed a descriptive analysis of documents such as annual reports, proclamations, foreign currency policy, and other documents that are relevant for the study. The purpose of the documentary review was to supplement the data obtained through the in-depth interviews as presented above.

3.4. Conclusion

In this chapter, the three types of research approach available to a researcher including qualitative, quantitative, and mixed methods each using different strategies of inquiry, and methods of data collection and analysis are discussed. The link between the research question and the method adopted in the particular study is clearly stated.

A mixed research approach is adopted for the study that helps the researcher to achieve the research objectives, research question, and hypothesis, and the required data is collected through documentary analysis, trend analysis, and in-depth interview.

CHAPTER FOUR

RESEARCH RESULTS AND DISCUSSION

4.1 Results

This section presents the results of a structured review of records maintained by the Ministry of Revenues, National bank of Ethiopia, World Bank, and in-depth interviews with importers and officials of NBE, and sixteen private banks and documentary analysis. In the first section, the results of a structured review of records were presented and this is followed by results of in-depth interviews and documentary analysis.

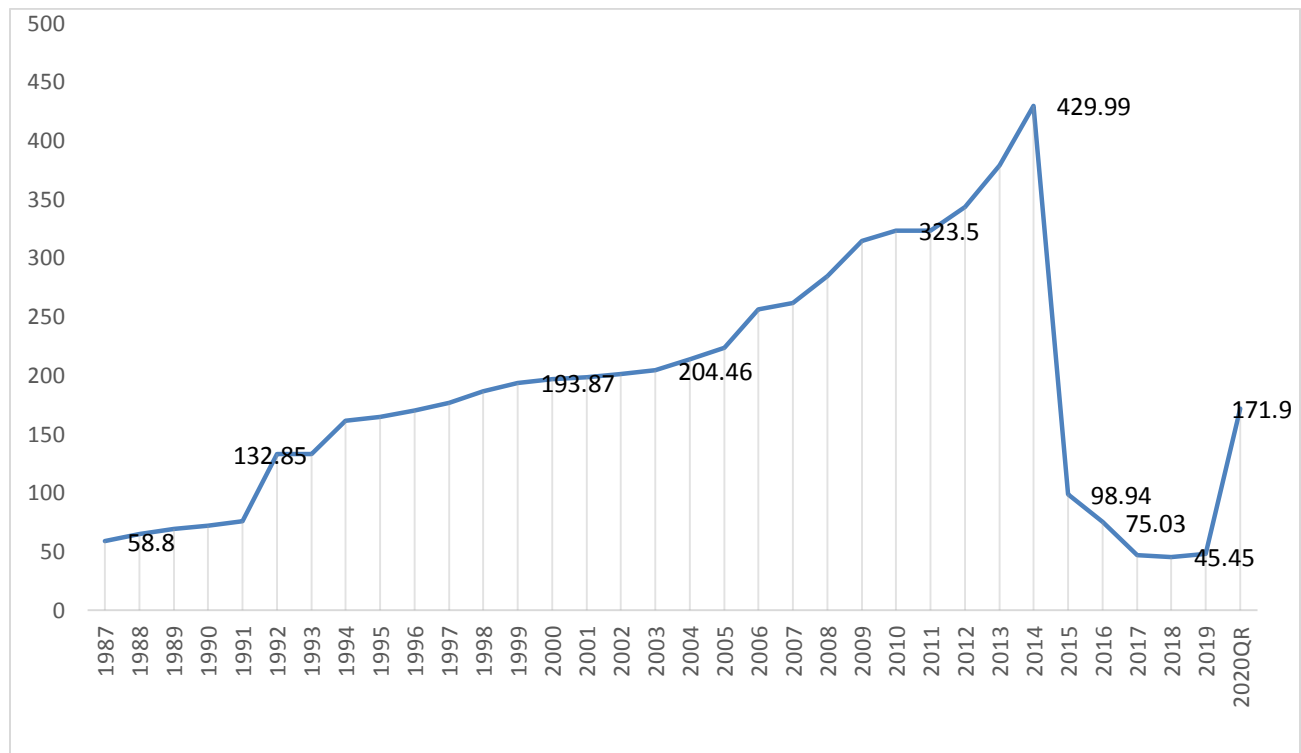
4.1.1. The results of a structured review of records (quantitative aspect)

This section presents first the trends for factors determining foreign exchange availability (shortage). This is followed by descriptive statistics of factors affecting imports and Regression estimates of factors determining imports are presented.

Trends of Foreign Currency Reserve in Ethiopia

Figure 4.1 of Historical records have shown that the country's gross foreign currency official reserve in 1986/87 was equivalent to 58.8year of foreign exchange reserve. It stood up to 132.3 and 193.87million of the reserve as of June 1992 and 2000, respectively.

Figure 4.1: Foreign exchange reserve at a time from 1986/87-2018/19

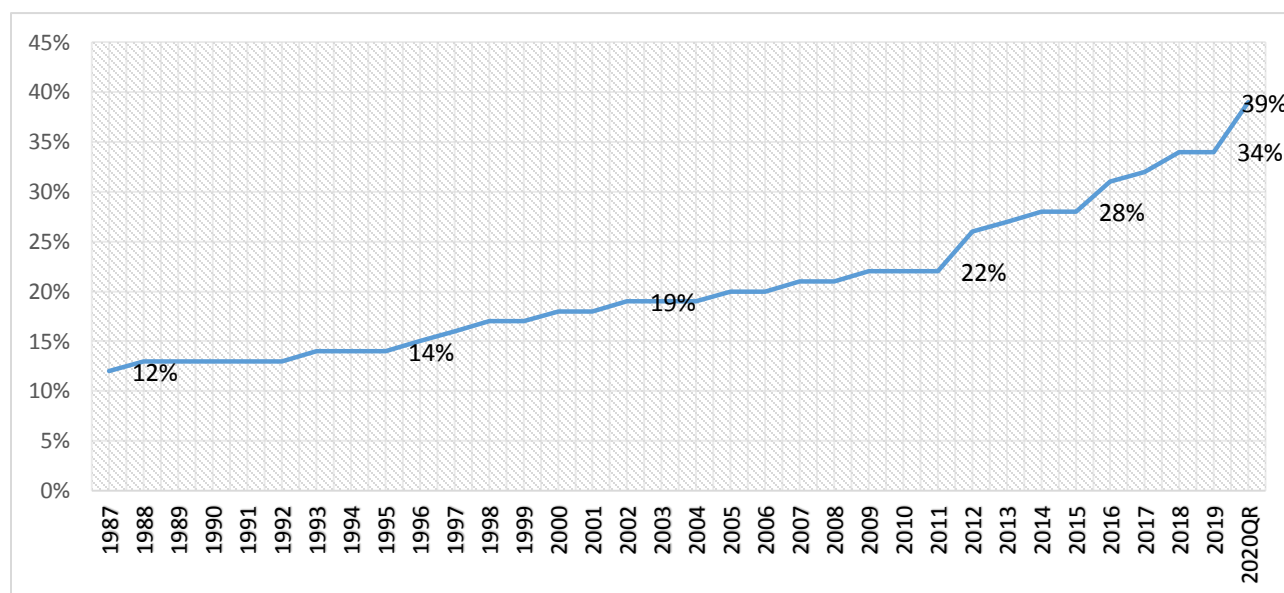


Source: Computed based on World Bank and NBE data, 2020

Trends of demand for imports of strategic goods and services in Ethiopia

The demand for foreign currency has been significantly increasing as import grows faster and higher than exports hence widening trade balance gap since 1986/87. In particular, the foreign currency demand for imports of strategic goods and services like petroleum, education, telecommunication, and defense, as well as imports of metals, fertilizers, and other capital goods was on the high side.

Figure 4.2: Trends of demand for Import of strategic goods & Service in Ethiopia from 1986/87 -2018/19



Source: Computed based on World Bank and NBE data, 2020

Table 4.1: Value of Imports by End-Use (in millions of USD)

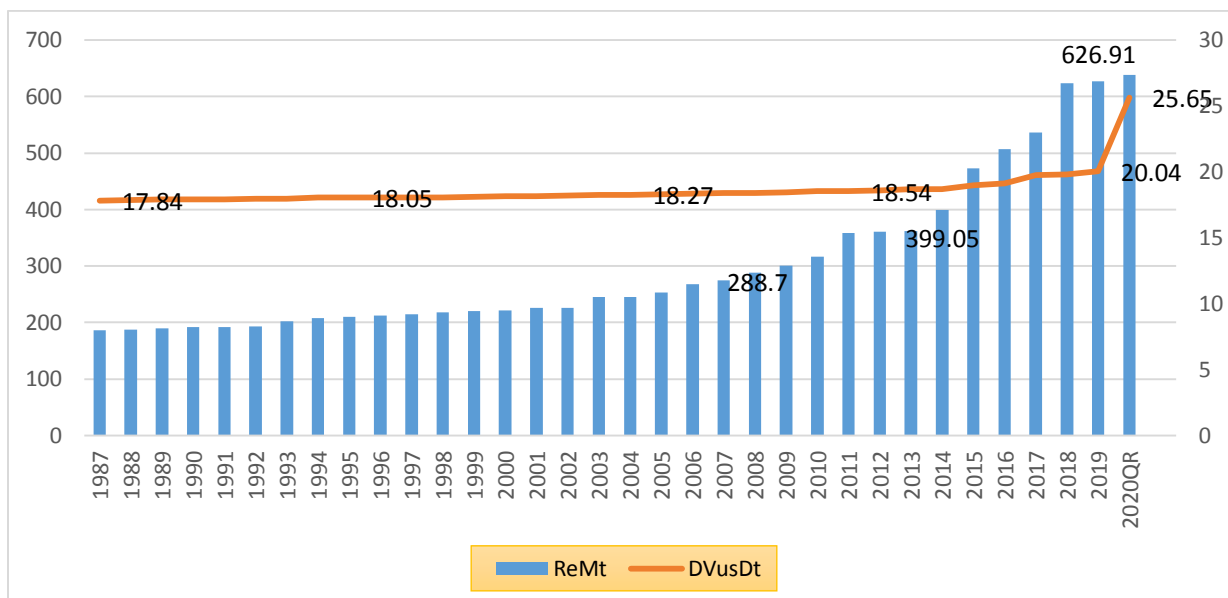
Items	Fiscal Years 2012-2019						
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Fertilizers	302.1	270.7	249.4	342.4	604.6	291.8	398.9
Fuel	1621.4	1256.6	1310.7	1659.3	2124.8	2163.9	2543.2
Capital goods	1777.4	2474.7	2886.3	2757.0	2961.7	3572.6	4500.3
Consumer	1515.7	2383.5	2515.7	2294.8	3531.7	3452.4	3834.1
Total Imports	8810.7	7726.6	8268.9	8253.3	11061.2	11467.3	13721.9

Source: NBE Annual Report – Britue Magazine, 2020

The correspondence of Remittance inflows & Depreciation in the value of the US dollar

Remittance is one of the potential and easily accessible sources of foreign currency inflow to the country (Boru, 2015). The flow of remittances via the formal channel (such as Western Union Money Transfer service, Money Gram, etc) has been incessantly growing from USD 288.7 million in 2008/09 to 399.05 USD billion in 2012/13. In 2018/19 the size of remittance has increased by 626.91 US dollar.

Figure 4.3: Remittance & Deprecation in the value US Dollar from 1986/17-2018/19

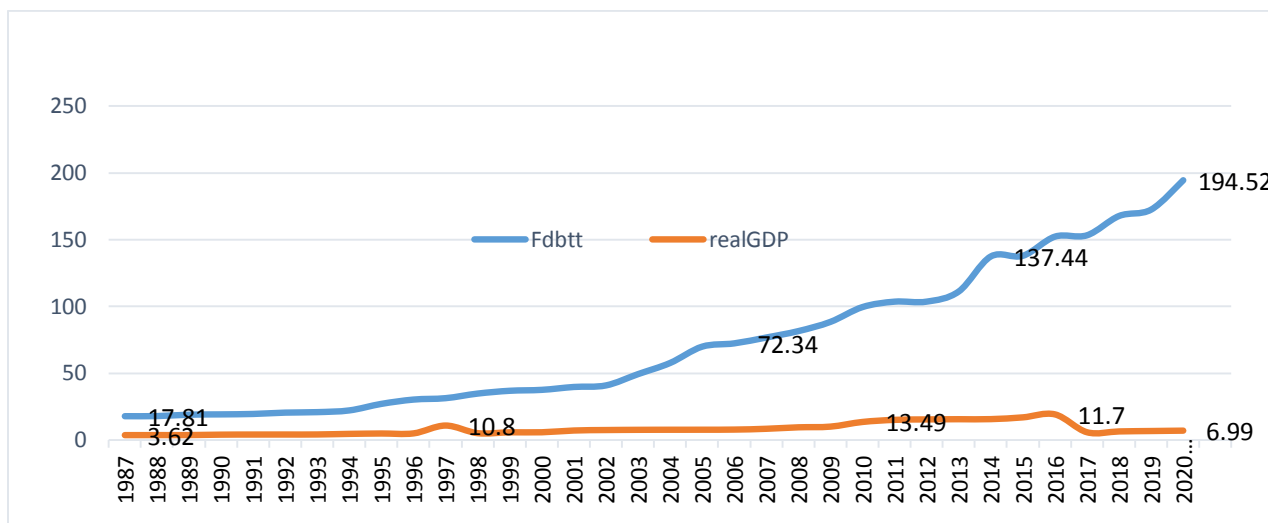


Source: Computed based on World Bank and NBE data, 2020.

Trends of foreign debt and growth of real GDP in Ethiopia

As can be seen from Figure 4.4 on Trends of foreign debt and growth of real GDP in Ethiopia, Ethiopian foreign debt was 17.81 billion Dollars in 1986/87, and in 2018/19 it reaches 194 billion US dollars. Where the Ethiopian foreign debt increases were being boomed, the Real GDP also declined from 11.7 to 6.99%. Real GDP growth averaged 11.7% per annum during 2017.

Figure 4.4: trends of foreign Debt and growth of real GDP from 1986/87 to 2018/19



Source: Computed based on World Bank and NBE data, 2020.

4.1.2.1. Summary Descriptive Statistics

The average net import is (0.207059) unit and its standard deviation is (0.072091). The lowest of net export is (0.120000) unit and the highest is (0.390000) unit. The independent variables include FERT, DVUSDT, REMT, FDBTT, INFT, and real GDP. The results in table 4.2 show that the average FERT is (185.3129) units and its standard deviation is (103.6379) units. The lowest of FERT is (45.45000) units and its highest is (429.9900) units. The average of DVUSDT is (18.62059) units and its standard deviation is (1.359539) units. The lowest of DVUSDT is (17.84000) units and its highest point is (25.65000) units. The average REMT is (305.2768) units and its standard deviation is (138.0131) unit. The lowest of REMT is (186.7500) units and its highest is (638.9100) units. The average of FDBTT is (72.48706) units and its standard deviation is (53.54162) unit. The lowest of FDBTT is (17.81000) units and its highest is (194.5200) units. The average of INFT is (1.488529) units and its standard deviation is (0.196640) unit. The lowest of INFT is (1.160000) units and its highest is (2.050000) units. The average of REALGDP is (8.207353) units and its standard deviation is (4.426979) unit. The lowest of REALGDP is (3.620000) units and its highest is (19.17000) units.

Table 4.2: Summary descriptive Statistics							
Measurement	IMD	FERT	DVUSDT	REMT	FDBTT	INFT	REALGDP
Mean	0.207059	185.3129	18.62059	305.2768	72.48706	1.488529	8.207353
Median	0.190000	181.5500	18.26000	244.8400	53.47500	1.440000	7.035000
Maximum	0.390000	429.9900	25.65000	638.9100	194.5200	2.050000	19.17000
Minimum	0.120000	45.45000	17.84000	186.7500	17.81000	1.160000	3.620000
Std. Dev.	0.072091	103.6379	1.359539	138.0131	53.54162	0.196640	4.426979
Observations	34	34	34	34	34	34	34

Source: Computed based on World Bank and NBE data, 2021.

4.1.2.2. Econometrics Analysis

Econometrics analyzes: is data using statistical methods to test or develop economic theory. These methods rely on statistical inferences to quantify and analyze economic theories by leveraging tools such as frequency distributions, probability and probability distributions, statistical inference, correlation analysis, simple and multiple regression analysis, simultaneous equation models, and time series methods. This study applied the common econometrics analysis; Series statistics (i.e. stationary test), Group statistics (i.e. Correlation among variables), Residual diagnostic (i.e. Normality), and Stability diagnostic (i.e. Model stability test). This analysis was already described from table 3.1 –table 3.6 in chapter 3 and after checking the stationarity of the variables, the next step is checking the bound test for co-integration.

Regression result indicating the impact of Foreign Currency Shortage in Ethiopia and Implications for Imports

Long Run ARDL Bounds test for co-integration

The first task in the bounds test approach of co-integration is estimating the ARDL model specified in the equation using the appropriate lag length selection criteria. A maximum lag of order 1 was automatically chosen for the conditional ARDL model. Because according to (Shin, 1999) for the annual data is recommended to choose a maximum of one or two lag lengths. Besides, the stationarity of the results confirmed that all variables were of order 0 and 1, and the more lags we include, the more initial values we lose.

The F-test through the Wald test (Bound test) is performed to check the joint significance of the coefficients specified in equation (1). The Wald test is conducted by imposing restrictions on the estimated long-run coefficients of IMd = Import Demand, FER: Foreign Exchange Reserves, DVusD: Depreciation in the value of the US dollar, Fdbt: Foreign debt, ReM: Remittance, INF: Inflation. The computed F-statistic value is compared with the lower bound and upper bound critical values.

Table 4.3: ARDL bound test result					
	Value	K	Critical value bound		
F-statistic	709.1124	6	10%	1.86	3.09
			5%	2.33	3.28
			2.5%	2.39	3.88
			1%	2.49	3.99

Source: Own the study from EViews 10, 2021

Note: Null Hypothesis is: No long-run relationship exists

ARDL Long Run Model Estimation

After testing the bound test for co-integration, the next step is a long-run model estimation. The results of the bound test indicate that the existence of a long-run relationship between; IMd = Import Demand, FER: Foreign Exchange Reserves, DVusD: Depreciation in the value of the US dollar, Fdbt: Foreign debt, ReM: Remittance, INF: Inflation, and Real GDP. The estimated long-run ARDL model is presented in table 4.4 below.

Table 4.4: The estimated long-run ARDL model is presented	
Dependent Variable: IMD	
Method: ARDL	

Date: 01/24/21 Time: 04:50				
Sample (adjusted): 4 34				
Included observations: 31 after adjustments				
Maximum dependent lags: 4 (Automatic selection)				
Model selection method: Akaike info criterion (AIC)				
Dynamic regressors (3 lags, automatic): FERT DVUSDT FDBTT REMT INFT				
Fixed regressors: C				
Number of models evaluated: 4096				
Selected Model: ARDL (2, 3, 3, 3, 2, 3)				
Note: final equation sample is larger than selection sample				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
IMD(-1)	0.283043	0.124313	2.276850	0.0488
IMD(-2)	0.766622	0.178131	4.303689	0.0020
FERT	1.27E-05***	1.41E-05	0.897653	0.0000
FERT(-1)	-1.29E-05	1.34E-05	-0.963082	0.3607
FERT(-2)	4.70E-05	1.26E-05	3.729716	0.0047
FERT(-3)	-3.97E-05	1.03E-05	-3.864312	0.0038
DVUSDT	-0.006271***	0.001527	-4.107795	0.0026
DVUSDT(-1)	-0.004276	0.001943	-2.200862	0.0553
DVUSDT(-2)	-0.015086	0.002382	-6.332497	0.0001
DVUSDT(-3)	-0.007277	0.003908	-1.862244	0.0955
FDBTT	-0.001023***	0.000242	-4.232448	0.0022
FDBTT(-1)	0.000736	0.000271	2.720228	0.0236
FDBTT(-2)	0.000496	0.000304	1.633552	0.1368
FDBTT(-3)	-0.000715	0.000255	-2.809874	0.0204
REMT	-0.000327***	8.71E-05	-3.752016	0.0045
REMT(-1)	3.44E-05	0.000142	0.242477	0.8138
REMT(-2)	0.000914	0.000198	4.619455	0.0013
INFT	-0.068765	0.058631	-1.172840**	0.2710
INFT(-1)	0.339187	0.085021	3.989451	0.0032
INFT(-2)	-0.493030	0.098722	-4.994144	0.0007
INFT(-3)	0.229871	0.049723	4.623017	0.0012
C	0.471991	0.151892	3.107419	0.0126
R-squared	0.999396	Mean dependent var		0.214839
Adjusted R-squared	0.997987	S.D. dependent var		0.070752
S.E. of regression	0.003175	Akaike info criterion		-8.484631
Sum squared residual	9.07E-05	Schwarz criterion		-7.466962
Log-likelihood	153.5118	Hannan-Quinn criteria.		-8.152896
F-statistic	709.1124	Durbin-Watson stat		1.822242
Prob(F-statistic)	0.000000			
*Note: p-values and any subsequent tests do not account for model selection.				

Note: * and **, * represent the significance of coefficients at 1% and 5% and 10% significance levels, respectively.**

Source: Own the study from EViews 10, 2021

As we have seen from table 4.4, above the estimated coefficients of IMd = Import Demand, FER: Foreign Exchange Reserves, DVusD: Depreciation in the value of the US dollar, Fdbt:

Foreign debt, ReM: Remittance, INF: Inflation, are statistically significance respective of sign changes in all variables but GDP is not statically significance which is omitted.

4.1.2.Results of Qualitative aspect

Interviews were conducted with importers, sixteen private commercial banks, and NBE international department officials, and the document analysis was conducted different documents such as annual reports, proclamations, foreign currency policy, and other documents that are relevant for the study. Most of the interview participants showed that the major sources of foreign exchange supply in Ethiopia are Foreign currency purchase, Export, Remittance, and recently the commercial banks using Diaspora financing are the dominant sources of foreign currency for private commercial Banks.

Most of the banks approved FCY based on the value of FCY generation (Depends on the availability of foreign currency 6 months, 1 year, and above) and the registration (Depending on the presentation of fulfilled documents) but only in one bank takes 1-3 days, and participants of interview stated that majority banks a specific focus on Machinery, construction material, electronics, medicine, car, Agriculture commodities and only in one bank does not have a specific focus.

Their average annual foreign currency need for their business ranges between 101,000.00 and 350,000.00 USD. Small numbers of the participants need an annual average of foreign currency less or equal to 100,000.00 USD and above USD 350,000.00. Future with related with business big machinery, processing plants, and even raw materials, the importers within the manufacturing sector shows annual FCY need of more than USD 350,000.00. Hence, the vast majority of interview participants stated that they have to wait for more than 3 months for just one request; this could further strengthen the real existence of the shortage which we already detected in the previous question.

The country still goes under heavy-duty constructions on a country basis, among the ongoing constructions mega hydropower development projects are the dominants.

Although the NBE prohibits exporters from using their foreign currency get from export to support their other import businesses, the majority of the sixteen private Banks under study seem

to support granting of foreign currency back to exporters for the facilitation of their import businesses to retain potential exporters.

The interview participants state that the alternatives for their immediate FCY need to be mentioned under-invoicing as a way of overcoming urgent FCY needs.

Participants stated that they transfer it to the ultimate consumers by adding marginal costs to the selling price of products and services.

4.2 Discussion

Based on data from a structured review of records, in-depth interviews and documentary review the subsequent sections discuss the results and attempt to address the research questions.

4.2.1. The Trend in the Gap between Demand for and Supply of Foreign Currency in Ethiopia

Foreign currency reserve stood up to 132.3 and 193.87million of the reserve as of June 1992 and 2000, respectively, due to the balance of payment support by foreign donors augmented by the increase in export earnings and foreign subside due to 1991 war collateral damage subsidies grant. But it exhibited swinging and declined as at June 2004 to cover 4 times of increments of foreign exchange reserve is reached to 204.46 million and non-factor-services of next year which 2014 by 429.99 million due to foreign aid of Ethiopian green revolutions (IMF, 2006).

It has been further dwindled to cover respectively only 98.94 Million, 75.03 Million, and 45.45 million per month of imports as of June lasted foreign exchange 2016, 2017, and 2018, which is almost equivalent to the minimum required level of the IMF. The current level of reserve position, which is closer to the minimum required level of the IMF would merely cover strategic goods like petroleum, and hampered the ongoing private investment that set as a pillar for a market-oriented economy and an engine for growth (Boru, 2015). In short, the country has a concern about inadequacy and less availability of foreign currency facing liquidity. The reserve position was started to mounting and reached to yearly of import as of 2018/19 as if foreign exchange. Recent year figures also indicated similar fluctuations which reflect the fact that it is one of the challenges that could entangle the country to meet its political distortion (Boru, 2015).

Two factors can be indicated by (IMF, 2006) cited in (Boru, 2015): the incessant growth in the price of strategic goods in the international market and the higher import volume of same to the domestic economy for accelerating and sustainable economic development program. For instance, previously, the structure of imports was mainly dominated by consumption and manufacturing inputs, but in recent years the highest portion of import value has been fetched by capital and investment goods. In general, the continuous increase in the international price of strategic goods and services, as well as the increase in imports' volume, due to strong demand has contributed to strong demand for foreign currency.

Remittance could have resulted from the enactment by the NBE of a new directive in 2006 and the rise in the number of amounts of money transferring agents in particular from Somalia refugees into Ethiopia. The number of Ethiopian citizens residing abroad in known 25 countries is conservatively estimated to reach above 2-3 million, indicating the potential source of foreign currency inflow via remittance. In sub-Saharan African countries, the inflow of foreign currency through remittance has doubly increased since 2003 and reached USD 10.8 Billion in 2007. Of which, the percentage share of Ethiopia is only 1.6%, which is scanty when compared with the large number of Ethiopians residing in developed and emerging economies mainly the USA, Canada, the Middle East, etc (Rao, 2016). However, figure 4.3 would have been considered, had the amount of foreign currency remitted via informal transmitting channels been added, suggesting the fact that most of the Ethiopian have opted to use the informal channel as they think it is a relatively cheap, fast, and reliable transfer service. In this regard, aggressive promotion is required to encourage the Diaspora to remit foreign currency via the formal money transmitting agencies in which Ethiopian banks have entered agency agreement.

From table 4.2, as explained above, the selected explanatory variables are IMd = Import Demand, FER: Foreign Exchange Reserves, DVusD: Depreciation in the value of the US dollar, Fdbt: Foreign debt, ReM: Remittance, INF: Inflation is determining the ratio of the sum of Monetary policy shock at time t to GDP measured is expressed in millions of ETB vs. US dollar.

On other hand, Real _GDP, Foreign Exchange Reserves (FEXR, import demand (IMd), and inflations are measure in percentage and the rest of the variables are measured in millions of birr. The Y-axis represents all variables used in this study and the X-axis represents time ranging from 1986/87-2018/19. The result shows import demand (IMd) has a higher dependent variable

value and the remaining variables during the study period while external Foreign Exchange Reserves (FEXR) follow it with a greater difference as if constant.

However, other variables such as DVusD: Depreciation in the value of the US dollar, Remittance, INF: Inflation is relatively in their infant stage in Ethiopia. As we observed from above the trends of all variables used in the model are different from one another with different increasing or decreasing rates at different periods. Even if some variables are measured in different units like Fdbt: Foreign debt, ReM which are not expressed in millions of birr unlike real GDP and other remaining variables, the researcher depicts these variables in this summary statistics since they are considered as determinants of monetary policy shock in Ethiopia.

Figure 4.3 facts that the US dollar is an intervention currency for Ethiopia, and most of the imported goods are often traded in the dollar, depreciation of the dollar highly increases from 2012 to 2019 which is 18.54% to 25.65%. The reserve position of the country that in turn brings about the depreciation in the Birr against the US dollar depreciation is 25.65% as importing the same quantity of the goods and services would now require more dollar value than previously. Hence, depreciation of the US dollar could be one of the factors contributing to the reduction of the foreign currency position in the real term (Boru, 2015).

The EPRDF (the existing government) has been adopted the typical structural adjustment policies of market liberalization, which issued a new economic policy in November 2018 folding GDP by 6.99% leased to 2019 by un control market-oriented economic policy and other development initiative programs by the reform case it decreasing (IMF, 2020).

4.2.2. The Main Sources of Foreign Exchange Supply in Ethiopia

There are four major sources of foreign currency which are commonly used as inputs to mobilize foreign currency deposits across commercial Banks in Ethiopia. The major sources of foreign currency; export, remittance, foreign currency /FCY/ purchases, and recently commercial banks use Diaspora financing for sources of foreign currency and they need special consideration to minimize the shortage of foreign currency.

4.2.3. Measures and Practices Importers Take In Mitigating Foreign Exchange Shortage

The possible implication from the shortage of foreign currency could be manufacturing sector require more foreign exchange than the other two businesses. The shortage is measuring the timeliness of the foreign currency approvals made.

According to the importers means, minimizing the value of foreign currency amount a particular invoice may need for the sake of taking advantage of early approval due to the invoice value. The difference between the actual value of the item to be imported and also the under-invoiced value will be paid through parallel (black market) fund transfers and therefore the other one is Bulk purchase and remitting of their currency respectively to be alternative ways for curbing their immediate need. This implies that, due to the shortage and consequent marginal operational cost they are incurring, the majority of the importers are contributing to the inflated price of goods and services they are selling and that they reduce their profit margin to the minimum possible.

The foreign exchange policy of the government is regarded as too tight and restrictive not allowing existing exporters as well as private commercial Banks to exploit the benefits and opportunities yielded within the field of international banking operations.

4.2.4. A Relationship between Import and Foreign Currency Reserve, Inflation, Depreciation in the Value of US Dollar, Economy Size, Exchange Rate and, Foreign Currency Availability.

Since the researcher has specified the growth model in a log-linear form, the coefficients of the dependent variable are interpreted as general Equilibrium concerning foreign exchange shortage identifications the long-run model result indicates that Depreciation in the value of the US dollar is -0.006271 are negatively influenced which is statistically significant at 1% significance level.

Thus, other things holding constant a one percent increase in Depreciation in the value of the US dollar a -0.6% of increase Annual foreign exchange which is decreasing importing demand index of Ethiopia. Therefore, it is the most significant variable that negatively affects the foreign exchange shortage shock output. The fact that the US dollar is an intervention currency for

Ethiopia and most of the imported goods are often traded in the dollar, depreciation of the dollar 0.6% of impacting the reserve position of the country that in turn brings about the depreciation in the Birr against the US dollar, as importing the same quantity of the goods and services would now require more dollar value than previously. Hence, depreciation of the US dollar could be one of the factors contributing to the reduction of the foreign currency position in the real term.

Next to Depreciation in the value of the US dollar, foreign debt has a negative significant long-run impact on the Ethiopian Economic growth which is the value of 0.001023 unities. *Ceteris paribus*, a one percent foreign debt increase in increased foreign currency shortage affecting has resulted in a 0.10% increase and affecting lowering Ethiopian import demand.

The findings of this research are concerning the long-run negatively distressing of composition foreign currency base shocks have a different effect although they are not distinguished well in the extant literature. One explanation of why composition shocks, alter the behavior of foreign debt interest curses the liquidity foreign exchange shocks as a signal that the central bank is playing a backstop role in banks' funding and risky asset during expending it (Boru, 2015).

On other hand, Foreign Exchange Reserves has a positive significant 1.27% of it affecting increasing country's import demand in the long run. This is due to a steady decrease in Foreign Exchange Reserves in Ethiopia starting around 2016. For instance, the Ethiopian population growth reaches in 2017, 80 million was 130 percent higher than the 2018/19 average of 27% (Fewsnet, 2009). The cycle of Foreign-exchange Reserve (FXR) reserves is not likely to be broken by devaluing the currency or transitioning to a flexible exchange rate, given the continued dominance of exports. Similarly, as economic equilibrium determinate, strong political opposition to the resulting inflation pressures indicates that such a policy is, in any case, very unlikely to be considered before the scheduled August 2020 legislative elections. Foreign-exchange Reserve (FXR) shortages are also driven by large outlays for underperforming foreign debt that was financed via domestic sources (primarily the two largest state-owned banks), the channeling of FX to service external debts (FX accounted for 8.0% of external debt servicing in 2018), in addition to weak non-agricultural export diversification (IMF, 2019).

Officials previously have discussed liberalizing the managed exchange rate and devaluation of the currency. However, floating the currency's exchange rate is very unlikely at this stage,

because the Ethiopian People's Revolutionary Democratic Front (EPRDF) coalition, which dominates the government, faces grassroots political opposition ahead of the scheduled 2020 elections, which would be worsened by any resulting increase in core inflation (already at 10.3% in June 2019), and higher consumer prices index.

In the ARDL long-run data, remittance figures are very closely related to the stock of import demand, that is the total number of migrant outflows from that country over several years found negative equilibrium which is reached to -0.327. This means the number of Ethiopian migrants sending in most countries tends remittance to be under-reported has no importance which is maybe residual in the black market. It follows that remittances to Ethiopia from the most country is underestimated.

In general, the inflation rate of imported goods like fuel, construction materials, fertilizers, and their related issues have a significant drawdown effect on the level of foreign exchange reserve found affecting import demand by approximately 1% negatively. Study shows that the domestic inflation of import items may thinly build up the foreign exchange reserve position as Ethiopian import may lack the required legality, and a higher level of foreign debt and government expenditure which is found effects of these combined interactions could rundown the reserve position and intensify the foreign currency liquidity problems (Boru, 2015).

Nevertheless, recently the recent price reduction of petroleum in the world market was expected to ease the ongoing foreign currency liquidity problem. But the reality is beyond the expectations for various reasons. Firstly, in the Ethiopian context, the fuel price hike is not the only source of the current foreign currency liquidity problem; rather it is a reflection of various economic and policy shocks (mainly a strategy shifts towards accelerated and sustainable development programs that entail huge demand for foreign currency from the aggregate demand). This suggests that the source of the problem could be broad-based economic phenomena (Boru, 2015).

There has been extensive public investment in various socio-economic spheres to realize the country's vision of reaching the level of middle-income countries by the year 2020. Hence, the sudden fall in fuel price, mainly associated with the global economic recession, emanating from

the financial crisis, might not bring about a significant resolute for the current liquidity problem; rather it gives only a fractional outlet (Boru, 2015).

Based on the NBE directive and policies, the problem would have been more serious, had the price would remain high.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions

The overall objective of the study is to evaluate the impact of Foreign Currency Shortage in Ethiopia and its Implications for Imports. The study used a mixed research approach that involves collecting, analyzing, and integrating quantitative (trend) and qualitative (interviews & document analysis). The results of the study revealed the following:

As many agreed, via running econometric models, interviews, and document analysis the shortage of foreign exchange reaction or the speed of adjustment of feedback was found higher impact which is shocking the equilibrium of import demand towards the long run this may the importer lead to buy currency from the black market.

First, the import demand was found affected foreign exchange shortage exacerbating due to the negative Depreciation in the value of the US dollar, foreign debt, lower Remittance, and aggregate higher Inflation impact which is reached 47% in total equilibrium point in the long run. Finally, the permanent source of foreign currency from export earnings is not able to increase at a commensurate rate with these ongoing demand hikes.

Second, The foreign currency loss incurred due to the seasonality effect would be offset with the foreign currency. Foreign currency is unable to run through the importer as it needs from the Depreciation in the value of the US dollar (Seasonality effects).

Third, Foreign currency /FCY/ purchases, Export, and remittance are the major sources of foreign currency for private commercial banks as one of the burning issues making foreign currency shortage the study has revealed the literal consumption of large amounts of foreign currency by ambitious mega projects of the government.

Fourth, The import sector of the economy is highly affected characterized by poor performance, delay, or cancelation of possible expansion that could generate additional wealth thereby

reducing unemployment. There is a problem with the sufficiency & timeliness of the annual FCY approved.

Fifth, The exporters using their foreign currency get from export for their import businesses, lack of a sufficient number of genuine exporters, and the lack of constraining policies and rules of the governing body are the reasons for the shortage of foreign currency.

Sixth, Where the NBE declares a new policy for the financing of the export sector while neglecting the other economic sectors meaning that more room will be given for export financing while narrowing it down for non-export financings the existing shortage of foreign currency across commercial Banks.

Seventh, The increments in the exchange rate of the existing informal and parallel markets /Black Market/ influences the society to exchange foreign currency notes and receive money transfers from the black market which is a legally prohibited act. In assessing the impact of the currency shortage on importers, important findings have arrived.

Eighth, The importers were the shortage affects their business by letting them lose their existing customers which is a clear and present danger for their existence in the business, threatening their relationship with their suppliers due to delay of payments, with clients due to failure to meet sales contracts, and also forced to delay or cancel their diversification plan, and some of them had to shrink and carry out layoffs due to the shortage. These effects on the importers could generally be taken as a negative implication of the foreign currency shortage on the Ethiopian economy.

5.2. Recommendations

Since the main objective of the study is to assess the implication of a foreign currency shortage on the Ethiopian economy, the researcher believes that most of the relevant variables in this regard have been addressed and analyzed in a way that could help identify what the situation on the ground looks like. In addition to the general objective of the implication on the economy of the FCY shortage, other specific objectives that are focused on the importers and the import sector were also addressed and analyzed to reach the above-listed conclusions. Based on the findings of the result, the conclusions made by the researcher are all negative implications of the

FCY shortage in the import sector. Accordingly, the researcher has made the under-mentioned recommendation which he believes will contribute to tackling the problem and even bring the solution.

- ✓ Private commercial banks have to fully exploit their major sources of foreign currencies by entertaining exporters with loans and advances at preferential rates, by assuring export document negotiation of their banks are in line with international standards, by rendering technical assistance to exporters, and also the introduction of lottery system that awards legally exchanging foreign currency notes at commercial Banks.
- ✓ Banks adding more money transfer partners, the introduction of international payment cards, and also the introduction of lottery system that awards remittance recipients; Banks should keep up the pace with the fastest emergent and changing technological advancement of remittance services to increase their level of engagement in enhancing and improving remittance services.
- ✓ Support the manufacturing sector should not only be to get export products but also substitute import items.
- ✓ If the government tries to diversify its external foreign exchange sources through coordination the Diaspora community in enhancing foreign remittances, taking policy measures in creating an entertaining working climate for Foreign Direct Investment, looking for access to low-interest loans and foreign Aid.
- ✓ The government should permit the exporters to use their foreign currency for imports that are not directly related to the export business.
- ✓ The government should minimize the Ambitious mega projects that were consuming excessive amounts of foreign currency, thus causing foreign currency scarcity across Banks.

5.3. Suggestions for Further Study

In these areas that could be considered for future research the number of respondents interviewed could be increased in a national study to extrapolate the conclusions to incorporate the general Ethiopian population;

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Appendices

Appendix 1: values of Exchange Rate, Inflation, GDP (income level), Import and Foreign Exchange Reserve

Year	Exchange rate	Inflation	GDP	Import	Foreign Exchange Reserve
1985	2.07	20.5	101,802.62	1,770,433	1,928.6
1986	2.0700	-11.8	111,910.16	2,201,265	2,590.0
1987	2.0700	-4.7	126,610.94	2,236,946	2,944.0
1988	2.0700	6.9	125,935.92	2,274,651	3,076.3
1989	2.0700	11.1	126,867.76	2,110,353	3,226.5
1990	2.0700	5.0	132,336.16	1,824,119	3,955.2
1991	2.0700	45.0	128,347.23	2,130,305	4,811.3
1992	2.0700	2.1	125,406.28	1,810,897.0	5,738.7
1993	2.8048	4.7	139,411.50	3,618,717.9	6,676.7
1994	5.7744	6.3	139,480.18	4,739,966.8	7,208.8
1995	6.2505	14.8	147,454.54	6,546,273.9	7,554.5
1996	6.3178	-9.0	162,373.14	7,708,246.5	7,956.5
1997	6.5007	-2.7	169,246.88	8,505,200.0	6,972.5
1998	6.8817	0.1	167,917.47	9,338,458.9	7,462.5
1999	7.5111	10.4	178,512.68	11,702,004.0	7,966.4
2000	8.1426	1.9	364,984.33	11,438,661.3	10,745.5
2001	8.3279	-10.8	392,058.84	12,313,956.1	8,846.2
2002	8.5425	-1.2	398,464.76	14,485,289.0	9,755.7
2003	8.5809	17.8	390,102.91	16,067,347.5	12,147.8
2004	8.6197	2.4	435,859.45	22,295,689.7	14,434.0
2005	8.6518	10.7	490,970.44	31,434,174.0	24,029.3
2006	8.6810	10.8	547,625.36	39,873,075.1	21,181.9
2007	8.7943	15.1	612,217.20	45,126,437.9	27,313.6
2008	9.2441	55.2	680,706.93	63,146,946.3	35,551.1
2009	10.4205	2.7	749,058.85	84,677,193.1	45,107.0
2010	12.8909	7.3	828,212.74	108,956,272.3	49,424.5
2011	16.1178	38.0	922,512.81	129,693,361.9	69,043.1
2012	17.2536	20.8	1,002,766.88	191,587,138.7	65,972.6
2013	18.19471	7.4	1,102,467.82	196,871,016.1	74,942.3
2014	19.0748	8.5	1,216,015.26	251,047,517.9	89,322.5
2015	20.0956	10.4	1,342,555.90	330,794,232.9	102,467.8
2016	21.1059	7.5	1,449,397.45	353,013,855.7	119,164.7
2017	22.4137	8.4	1,596,481.63	352,453,569.0	146,257.9
2018	26.1082	16.8	1,719,491.33	397,115,467.6	174,175.4
2019	28.0543	15.3	1,874,689.30	423,394,150.7	200,749.3

Appendix 2 *Interview Questions for importers*

1. What field of work are you involved in and how long have you been in business?
2. How long should you have to wait before your single pro-forma invoice gets approved?
3. The delays are similar when using CAD or LC?
4. You use your retention account for import?
5. Do you get the foreign currency amount that you request?
6. What do you think is (are) the reason (reasons) and factors for the shortage?
7. Do you use informal channels for settle the payment?
8. Do you think black-market minimize the current shortage of foreign currency shortage?
9. Do you say that foreign currency shortage has affected your capacity?
10. Do you say that foreign currency shortage has affected diversification / expansion plan of your work?
11. Is there any reduction you have made due to shortage of foreign currency in the total compensation paid to employees or any layoff?
12. How do you compensate those expenses that resulted from the foreign currency shortage and actions taken in this regard?

Appendix 3- *Interview Questions for Management*

Interview Questions for Senior IBD Department Officials of NBE and Private Commercial Banks under Study

1. What are the sources of foreign currency?
2. Does your bank take special considerations for export? Please describe if there any technical assistances other than the common or regular services that your bank provides to exporters in order to support their business?
3. What are the common available financings (credit financings products) for exporters in your bank?
4. Please describe the level of engagement of your bank in enhancing and improving remittance services?
5. Is your bank schedule to approve foreign currency request?
6. What type of commodities that your banks focus?
7. Are you support your Client (importers) in using LC, CAD, and TT using their retention and Diaspora accounts for importers?
8. How long to approve non-priority and priority LC?
9. How many percent that the foreign currency you get give to NBE?
10. In your opinion what Factors affect the import sector?
11. Please describe your banks contribution in preventing illegal sale and purchase of foreign currency in the black market?