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**St. MARY'S UNIVERSITY**

**SCHOOL OF GRADUATE STUDIES**

**DETERMINANTS OF FOREIGN DIRECT INVESTMENT IN ETHIOPIA:  
A TIME SERIES ANALYSIS BETWEEN 1992 - 2016**

**BY**

**EYERUSALEM SOLOMON**

**MAY, 2018**

**ADDIS ABABA,  
ETHIOPIA**

**St. MARY'S UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**

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A TIME SERIES ANALYSIS BETWEEN 1992 - 2016**

**A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY, SCHOOL OF GRADUATE  
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Addis Ababa,  
Ethiopia

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## DECLARATION

I, the undersigned, declare that this is my original work, prepared under the guidance of Dr. Maru Shete (Assoc. Prof.) All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institutions for the purpose of earning any degree.

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Date and signature

**ENDORSEMNT**

This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a university advisor.

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Name of advisor

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Signature and date

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## **List of Acronyms**

FDI	Foreign Direct Investment
UNCTAD	United Nations Conference on Trade and Development
OECD	Organization for Economic Corporation and Development
IMF	International Monetary Fund
GTP	Growth and Transformation Plan
COMESA	The Common Market for Eastern and Southern Africa
EIA	Ethiopian Investment Agency
EIC	Ethiopian Investment Agency
WTO	World Trade Organization
LDCs	Least Developing Countries
PCI	Per Capital Index
MoFEC	Ministry of Finance and Economic Cooperation
INF	Inflation
INFR	Infrastructure
EXR	Exchange rate
MKTS	Market size

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## Abstract

*This paper aimed at investigating the factors determining FDI in the Ethiopia economy for the period of 1992–2016. Developing countries like Ethiopia follows liberalized trade and tries to create a convenient environment for foreign investors by developing policies and regulations to attract Foreign Direct Investment (FDI). The study gives an extensive look at the theoretical and empirical analysis to establish the main determining factors of FDI. The objective of the study is to asses the trend and factors determining FDI in Ethiopia economy. hypothesis were formulated and multiple linear regression model is used for analyzing impact of all independent variables on Foreign Direct Investment inflow. The variables used in this study are infrastructure, market size, inflation rate and exchange rate as independent variables and Foreign Direct Investment as dependent variable. Also the trend of each variables within the given period of time has been shown using simple linear regression. The result showed that Market size and Exchange rate are the most significant determinant of FDI in flow in Ethiopia. And Infrastructure and Inflation rate have insignificant. The study also found that having an increasing trend ,the pattern of FDI inflow in Ethiopia is very unstable.*

**Key words:** Determinant, Exchange rate, Ethiopia, FDI, Trend, Market size

# CHAPTER ONE

## INTRODUCTION

### 1.1 Back ground of the Study

An investment made by a company or individual in one country in business interests in another country, in the form of either establishing business operation or acquiring business assets in the other country, such as ownership or controlling interest in a foreign company is known as foreign direct investment (FDI). FDI is defined as an investment involving the transfer of a vast set of assets, including financial capital, advanced technology and know-how, better management practices, etc. This investment is carried out by an entity (a firm or an individual) in foreign firms, involving an important equity stake in or effective management control (UNCTAD, 2007).

FDI is generally considered, by many international institutions, politicians and economists as a factor which enhances host country economic growth, as well as the solution to the economic problems of developing countries by influencing the host country's economic growth through the transfer of new technologies and know-how, formation of human resources, integration in global markets, increase of competition and firm development and reorganization (Mencinger, 2003). Foreign direct investment is an integral part of an open effective international economic systems and a major catalyst to development. Yet, the benefits of FDI do not accrue automatically and evenly across countries, sectors and local communities. National policies and international investment architecture matter for attracting FDI to larger number for developing countries and for reaping the full benefits of FDI development. The challenges primarily address host countries, which need to establish a transparent, broad and effective enabling policy environment for investment and to build the human and institutional capacities to implement them (OECD, 2002).

There are three different types of FDI .the first type of FDI is called market-seeking (horizontal) FDI, where investor's purpose is to serve local markets. The reason for market-seeking FDI is market size and market growth .The second type of FDI is asset - seeking or resource- seeking FDI and takes place when a company's purpose is to gain access or acquire the resources in the host country which are not available in home country such as raw materials ,natural resources or low-cost labor. The third type of FDI is efficiency-seeking FDI, which take place when a company can gain when there is a common governance of geographically dispersed activities and presence of economies of scope and scale. Foreign direct investment (FDI) is one of the important factors for the sustainable economic growth. It can create employment, increase technological development in the host country, and improve saving, increase access to foreign currency and the economic condition of the country in general. Now a day's to close the gap between the shortage of capital for investment and the required level of investment FDI is taken as the best alternative. In the early 1990's,cross- border capital flows rose sharply (Calvo et al, 1996).

There is an agreement that the development benefits of FDI are not automatic, but will depend on a number of conditions in a host economy. The overall evidence from macro-level empirical research favors positive effects of foreign presence on wages and the volume diversity of domestic exports, but finds no consistent relationship between the size of inward FDI stocks or flows and GDP growth (Lipsey, 2001). On the contrary, the other group argues the benefits that can be derived from FDI inflows are quit small compared to its adverse effect. The major negative effects are stifling the infant domestic industries, loss of political sovereignty and weakening of balance of payment due to foreign investor's excessive capital good importation and profit repatriation by foreign investors. As a result of this, most developing countries doubted the worthiness of FDI (Solomon, 2008).

Empirical study by the OECD concluded that FDI is one of the main defining features and key drivers of global value chains (OECD, 2017). Goshou and Soumare (2012) conducted a study to investigate the interaction between FDI and poverty in Africa during 1990-2007. The variables were the poverty rates, FDI, human development index, GDP, financial and political conditions, the investment environment, institutional quality and political risks. The study concluded that there is a positive relation between FDI and poverty reduction. Moreover, FDI have a greater impact on the welfare of poorest countries rather than the richer ones. With FDI host country will acquire technological and managerial skills, supplement domestic saving and also foreign exchange. The 'home' countries also take advantage of the available market and resources. As a result of this, in the present globalized world many countries focus on formulating policies and providing convenient environment in order to attract the inflow of FDI.

The determinants of FDI according to the empirical studies are classified in to two sides demand side and supply side. The demand side includes variables related to the host country(country –specific).The supply side includes variables related to the investing company itself (company-specific).country specific variables possibly will include market size, economic growth, balance of payments, inflation rates, tax levels, political stability and government policies for foreign investments. Host countries can posses location specific advantages, such as their domestic markets, natural resources and labor forces that serve to attract investment by foreign investors (Mohammed, 2015). FDI development played important role in the success of many Asian countries. The advanced countries in the Asian continent as well as the emerging economies of the region gave lesson to the rest of the world for how to use FDI in development path. They used FDI to fill the gap of saving for investment until they create sufficient saving culture, and the main strong point they transferred to the rest of developing countries is how to be a conveyor belt for technology transfer by using FDI (Henok and Dan, 2012). Market size is the fundamental determinate of FDI. Per capital income, which is an indicator of effective demand is used to measure the size of local market (Atlaaw et al, 2014).

Market size is one of the most important determinant factors of FDI (Abdoul, 2012). The stock of inward FDI in Ethiopia has grown steeply in the past decade, although the rate of accumulation has slowed since the onset of the global crisis in 2008. The level in 2011 was almost five times the level in 2000 (Henok et al, 2012).

In the current stiff global competitive business environment infrastructure has a big role for the entry of new firms. Infrastructure development has importance for the expansion of FDI because efficient and adequate infrastructure implies better access to natural resources and potential market (Jhon, 2012). In order to improve the return investment for FDI in Africa, improving the development of infrastructure is very important (Abdoul, 2012). According to neoclassical economist availability of low labor cost is one of the factors that affect the foreign investment decision. In addition to cheap labor, the labor productivity ratio also determines the inflows of FDI (Solomon, 2008). Frequent and erratic changes in exchange rate of the domestic currency affect the inflow of FDI (Goldberg and Klien, 1997). It has been argued that low and volatile FDI is part of the challenges to the persistent poverty, high inequality and underdevelopment of the sub Saharan Africa countries (Naude and Kuegell, 2007). Following the sharp decline in capital flows worldwide proceeded by the global crises of 2007-2008, FDI flows to developing countries rebounded more quickly than other components of global capital flows (Dutttagupta et al, 2011).

## **1.2. Statement of the problem**

Foreign direct investment inflows in Africa continued to decline in 2016. In 1991 Ethiopia transitioned to market oriented economy. Since then different policy reforms including liberalizing the foreign trade regime, reduction of import tariff rates, devaluation of national currency, decentralizing of political and economic powers and deregulation of domestic price were taken. The world investment report stated that Ethiopia as one of the top performing African countries in FDI flow registering 16% increase in 2016 (UNCTAD, 2016). From several factors which contributes for economic growth, foreign direct investment is one which can relieve the transfer of technology that have extensive effects for the entire economy to developing countries (Romer, 1993).

The Ethiopian economy had an impressive record of growth and poverty reduction in recent years, with GDP growth averaging 10.1 percent in 2010/11–2014/15 (IMF, 2016), And the key goal of GTP II is to become a lower middle-income country by 2025, through average annual



real growth of 11 percent in 2015/16–2019/20. Which places emphasis on private sector development and FDI, particularly in building export-oriented manufacturing sector (IMF, 2016).The government has also issued several investment incentives, including tax holidays, duty free importation of capital goods and export tax exemption to encourage investment. Ethiopian Investment Commission (EIC) has also been established which was previously known as Ethiopian Investment Agency (EIA) to service investors and provide efficient services to investors (COMESA, 2017).

Even though the above mentioned reforms have been taken in order to attract FDI, different findings have a contradicting conclusions on the performance of attracting FDI to developing countries in general and to Ethiopia in particular. Ethiopia witnessed a decline in FDI by a number of projects in 2015 (OECD, 2016).

In Ethiopia, a significant progress has been made in terms of transport infrastructure and electricity production in order to improve Ethiopia's attractiveness of FDI. But still, there are a number of constraints to foreign investment (UNCTAD, 2017). Therefore, it is important to identify the main determinant factors of FDI, and to analyze the effect of FDI on economic development.

Data from the UNCTAD shows that the value of FDI in Ethiopia was below 140 million birr before year 1996 and it was after this year that FDI in Ethiopia counted in billions of birr. Among the possible factors leading to the sluggish growth of FDI inflows was lack of knowledge on what principally affect the inflow of FDI in the country's content and perform in view of it (Haregewoyn, 2016). By finding out either the result of flow of FDI is increasing, decreasing or indifferent, the study tries to identify the determinate factors that favorably and unfavorably affect the flow of FDI for the period of 1996–2016. So far, different determinate factors have been identified by different researchers and authors (Haregewoyn, 2016). FDI in Ethiopia is highly determined by domestic investment, lending interest rate ,exchange rate depreciation ,domestic market potential and trade openness (Tewelde, 2016). Liberalization of the trade regulatory regimes, stable macroeconomic and political environment and significant improvement of infrastructure are indispensable to attract FDI. Getinet & Hirut (2005), in their study concluded that macroeconomic instability and poor infrastructure determine the inflow of FDI and the growth of real GDP, export orientation and liberalization promotes the inflow of

FDI. To know and understand the real determinates of FDI is a very essential to be able to make improvement and perform better.

### **1.3 Research objectives**

#### **1.3.1 General objective**

The general objective of this study is to assess the determinants of FDI in the Ethiopian economy for the period of 1992–2016.

#### **1.3.2 Specific objectives**

- To asses the trend of FDI in Ethiopia.
- To investigate the determinant of FDI in the Ethiopia.

#### **1.3.3 Research questions**

1. Is the pattern of the FDI flow increasing or decreasing over the 25 year period (1992–2016)?
2. What are the main factors that attract or hinder FDI in the country?

### **1.4 Research hypothesis**

- $H_0$  :Infrastructure do not have a favorable effect on attracting FDI.  
 $H_1$  :Infrastructure have a favorable effect on attracting FDI.
- $H_0$  :Market size do not have a favorable effect on attracting FDI.  
 $H_1$  :Market size have a favorable effect on attracting FDI.
- $H_0$  :Inflation rate do not have a favorable effect on attracting FDI.  
 $H_1$  :Inflation rate have a favorable effect on attracting FDI.
- $H_0$  :Exchange rate do not have a favorable effect on attracting FDI.  
 $H_1$  :Exchange rate have a favorable effect on attracting FDI.

## **1.5 Significance of the study**

In addition to contributing to the existing literature on this area, the findings of this study and the results of other papers in this area will have a clear know how of trend and determinant of FDI. Also the result will contribute to policy implications that can be implemented to attract FDI. FDI contribute substantially to the economic growth of developing countries like Ethiopia and so it is very important to study main determinant of FDI. Developing countries have limited source of capital for investment. Ethiopia has invested a lot on the improvement on making an attractive environment. It is important to study to what extent Ethiopia economy is benefiting.

## **1.6 Scope and limitation**

Geographically, this study has covered all regional states of Ethiopia areas and countries other than this boundary are not subject to this study. It is also delimited by the time period between 1992–2016/time scope/. Also conceptual scope also exist it's clear that from the research title that it focuses only on two main parts. These are to assess the trend of FDI flows, here evaluate the linearity of increase or decrease over the study period by treating time as independent and all the other variables including FDI as dependent. And identify the determinants factors of FDI. Here, FDI was treated as dependent variable and four variable as independent variables which are inflation, market size GDP taken as proxy, exchange rate, inflation rate and infrastructure ratio of capital expenditure and GDP . Methodologically, the scope of the study is delimited to the use of Dicky –Fuller test with multiple linear regression for identifying the determinate factors to FDI flows.

Although this study raise very interesting researchable issue, like many other studies it is subjected to some limitation. The study used limited variables in analyzing the determinant and trend of FDI which can delimit strength of the decision as compared to using more variables. Furthermore, the study mainly relies on secondary data collected by others.

Therefore, the study is limited to the information available in the data collected. In addition to that, the researcher is a post graduate student with limited experience, skill and capacity to carry out the study. This has its own effect on the kind of analysis and the type of methodology used in this study.

## **1.7 Organization of the study**

This paper is organized in five chapters. The theoretical and empirical reviews are discussed in the second chapter. Chapter three presents the model specification and methodology of the study. Chapter five is devoted to summary, conclusion and recommendation.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Concepts and definitions of FDI**

FDI is a transfer of capital across borders, which allows the receiving economy to increase investment beyond its saving rate. Traditionally development economies has focused on its addition to the capital stock as a core contribution of foreign investment to economic development (Lall and Streeten, 1977). FDI is a stronger mechanism of technology diffusion across countries than international trade (Hejazi and Safarian, 1999). The neo-classical school approach contends that FDI includes new assets, capital and enhances the showcasing expertise of host nation's citizens. It additionally provides employment opportunity and improves the utilization of normal assets efficiently within to other factors (Harris, 2011). FDI is a type of investment delivered at global level. FDI might like wise be the investment made by citizens of one nation in a company present in another nation and at times obtain a joint-venture with the foreign company (Sukumar, 2011).

According to IMF it gives the definition of FDI, an investment that is made to acquire a lasting interest in an enterprise operating in an economy other than that of the investors' purpose being, to have an effective voice in the management of the enterprise. According to the World Trade Organization's (WTO, 1996) definition, FDI occurs when an investor based in one country (the home country) acquires an asset in another country (the host country) with the intent to manage that asset. The management dimension is what distinguishes FDI from portfolio investment in foreign stocks, bonds and other financial instruments. There are different types of FDIs like establishment of a new firm that in turn enables to create productive assets in a host country, it is usually financed by capital coming from investor's country, selling of local productive assets to a foreign investor is referred as international or cross border merger and acquisition and reinvested earnings refer part or all of the profit that is not repatriated to investor's country but reinvested in the host country (UNCTAD, 1998).

FDI can be classified into three groups market seeking, resource-seeking which are attracted by the low cost of resources mainly labor (UNCTAD, 2007). The existence of FDI in the host country can be considered for the advantage of using resources efficiently and efficiently .Firms sets up plant not only to supply the host country's market but also the host nations neighboring countries (WTO, 2012). FDI is a major source of finance and can facilitate the entrance of technology from advanced and developed countries to the host developing country and through this channel the host country will be able to compete in international markets (Tekin, 2012). FDI enhances the efficiency of production and can promote specialization and productivity in the host country (Xing & Pradhananga, 2013). Moreover, FDI improves employment, job skills, managerial expertise, export markets and tax revenues.

Tradeoff is defined as the relationship in business transactions conducted by the host countries by engaging in export promotion and import substitution in a global perspective. This aspect brings the balance of payment between the markets of the foreign commodities and enhance that the mutual benefit derived is sufficient to sustain the economy into running (Maddallah, 2017). (Thomas & Katrin, 2016) said that 'Economic sustainability of host countries in regards to the national output and gross national product. Contribution of FDI in economic growth of the country is more than the domestic investment'. According to researchers, manpower is directly related to growth of the country's economy. As per the sample of American countries, country must have economic stability, human capital resources and there should be liberalization in the market for significant positive impact of FDI on economic growth of the country.

Even though there exists of studies about the relationship between FDI, exports, and economic growth, there are no common consensuses regarding this issue between different studies, so working on this issue is still required. There is a conflicting evidence in the literature regarding the question as to how and to what extent, FDI affects economic growth.

FDI may affect economic growth directly because it contributes to the capital accumulation and the transfer of new technologies to the recipient country. And indirectly FDI affects the economy growth through new management practices, labor training and skill accumulation and a better organization arrangements.

FDI is an important category of international investment that shows a long-term relationship between direct enterprise and investors. When total number of investment increases it directly contributes to economic growth. By increasing capital stock, FDI can increase country's output and productivity through a more efficient use of existing resources and by absorbing unemployed resources (Zbida, 2010). Different types of FDI lead to varied types of spillovers, knowledge transfers and tangible and intangible capital flows (Hooda, 2011). Moreover FDI stimulates the development and propagation of technological skills through MNCs, internal transfers and through linkages and spillovers among firms (Borensztein et al, 1998). FDI also helps to increase local market competition, introducing modern job opportunities and encourage market access for the developed world all of which should ultimately contribute to economic growth in recipient countries (Nunnenkamp et al, 2001). Apparently, developing countries need to have reached a certain level of development in education, technology, infrastructure and health before being able to benefit from a foreign presence in their markets. Imperfect and underdeveloped financial markets may also prevent a country from reaping the full benefits of FDI.

There is an argument that FDI has positive effect on economy of the country only for short period of span. In long run foreign direct investment has adverse impact on country's economy. The reason behind negative effects that are achieved to the resulting economy in long run is that the institutions that are developed with the support of foreign investment demands more foreign investment and causes negative impact like, unemployment among the people, disparities of income, over-urbanization, increasing inequality between rich and poor.

Different measure is selected for foreign direct investment that is total percentage of FDI which is contribute by general economy of the country makes the sum to increase in the budget of the nations which are investing, but it is still illustrating adverse impact on country's economy in the long run (Maddallah, 2017).

## **2.2 Determinants of FDI**

The eclectic theory was developed by professor Dunning. This paradigm includes three different theories of FDI, ownership-specific (O), location – specific (L) and internalization (I). It also called OLI framework, This theory insists that all the three factors (OLI) are important in determining the extent and pattern of FDI .The ownership specific advantage includes both tangible asset such as natural endowments, manpower, capital and intangible assets such as information technology, managerial marketing skill, entrepreneurial skill and organization systems. Firms have a monopoly over its own specific advantages and using them abroad leads to higher marginal profitability or lower marginal cost than other competitors, the location (country- specific) advantage includes factor endowments, market structure, government legislation and policies and political legal and cultural environments in which FDI is undertaken and internalization refers to the firm’s innate flexibility and capacity to produce and market through its own internal subsidiaries. Assuming the first factors outside the country of origin internalization (Duning, 1988).

Well established and quality infrastructure is an important determinant of FDI Inflows which has a positive relationship between FDI and infrastructure (Asiedu, 2002). Availability and reliability of telecommunication services, developed and adequate road and air transport services, reliable water and electricity supply facilities have paramount importance for profitability of foreign companies and in attracting FDI (Birhanu, 1999).

The above mentioned indicates that lack of efficient infrastructure means not only high transaction cost for the investors but also a barrier to entry of new firms.

Transparent and reliable legal and regulatory frameworks promote both domestic and foreign investment, an inefficient and ineffective legal system is an obstacle to enforce laws and contacts (Solomon, 2008). However, UNCTAD (1999) indicated that an efficient and transparent legal system and in particular LDCs, does not automatically make a country more attractive for FDI. UNCTAD (2004) reported that the availability of cheap labor in china is taking jobs from Europe and United states. In addition to cheap labor, the output labor ratio (labor productivity) also determines the inflow. Frequent and erratic changes in exchange rate of the domestic currency affect the inflow of FDI (Goldberg and Klien,1997). Exchange rate devaluations have a twofold role in explaining variation of FDI. On the one hand, the real value



of foreign investors' capital increases when the host country's currency is devaluated. On the other hand, frequent and continuous declines in the value of host country's currency would decrease FDI inflow, as it creates high uncertainty (Accolley et al, 1997). Inflation reduces the real return on investment and firms' competitiveness through the effect on the cost of inputs and the price of output. Hence, countries that pursue policies that reduce inflation rate have better chance in attracting FDI. Therefore, higher and unpredictable inflation will decrease the inflow of FDI (Berhanu, 1998). The inflow of FDI into a country can be disrupted by internal and external political conditions. Whatever the economic environment there is a country effort to create a more hospitable environment for overseas investors cannot be fruitful. Political instabilities can delay FDI until the storm diverts away for good (Solomon, 2008).

The market size of domestic market is a fundamental determinant of FDI. The wealth and development of a country can be used as a proxy to measure the size of the domestic market. Most commonly per capita income (PCI), which is an indicator of effective demand, is used to measure the size of local market.

However, if a firm is export-oriented and not market seeking, the size of domestic market will not be an important determinant of FDI (Root and Ahmed, 1979). The domestic market growth rate which is measured in terms of population and GDP growth rate also determines the inflow of FDI into a country (UNCTAD, 1988). The effect of FDI on economic growth is dependent on the level of human capital available in the host economy and there is a strong positive interaction between FDI and the level of educational attainment (Borensztein, 1998).

### **2.3 Role of FDI in economic development**

FDI contributes to economic growth only if the host economy has a sufficient absorptive capacity (XU, 2000). FDI in the host country has growth effects, technology spillover effects, backward and forward linkage effects, trade effects and competition effects (Kim & Lee, 2015). Through FDI, domestic firms get access to new knowledge, production systems, managerial skills and technology all of which have the potential to increase productivity in the host country. Multinational companies are usually attracted to a particular country by the comparative advantage that the country offers. Not only does FDI provide advantages in host state, it is additionally valuable to the financial investor and home state of the investors through their

investment. Likewise, it build up a decent relationship between nations included in the investment (Cavusigl, 2012).

## **2.4. Empirical literature**

Developing and emerging market economies' increasing participation in FDI inflows over the past two decades reflects both push and pull factors (Fayyaz, 2012). On the push side, declining transportation costs, significant differences in factor prices, and slowing growth rates in developed countries drove an increasing number of firms to establish operations abroad.

On the pull side, many governments, seeing FDI as key to bringing the capital, technology, and know-how needed to move their economies from traditional activities to higher-end manufacturing and services. Not only liberalized flows but active competitiveness for FDI with a variety of preferential incentives and policies increase FDI inflow (Harding & Javorcik, 2007).

FDI was the principal source of flow to developing countries in 1990. Unlike other capital flows, FDI has a fewer degrees of volatility and does not follow a pro-cyclical behavior. The FDI inflows have increased rapidly since the late 1980s and the 1990s almost worldwide. This issue makes it necessary to reveal the costs and benefits of FDI inflows (Acaravci & Ozturk, 2012). Productivity spillovers and market access spillovers are measured by changes in local firms changes respectively, productivity and improved access to international markets (Blomstrom et al, 1986). According to the study done by Agrawal (2012) on economic impact of foreign direct investment in south Asia by under talking time series , cross- section analysis of panel data from five south Asian countries such as India, Pakistan, Bangladesh, Sri Lanka, and Nepal, that there exist complementarily and linkage effects between foreign and national investment . Further ,he argues that the impact of FDI inflows on GDP growth rate is negative prior to 1980, mildly positive for early eighties and strongly positive over the late eighties and early nineties. To sum up, the relationship between FDI and economic growth is empirically supported but the direction causality is unclear.

Foreign Direct Investment (FDI) from developing countries has risen sharply over the past two decades. This has been noted by several authors since the early 1980s. The faster growth and relative shortage of capital in developing countries would suggest that developing countries are more likely to be net recipients of investment than net investors, although more firm-based or

industrial explanations for investment mean that this need not imply that there will be no outward flows (UNCTAD, 2004).

Neo-classical researchers regard FDI and international capital flows as closing the savings gap in developing countries (Chenery and Bruno, 1962). We would expect capital to flow from capital rich to capital poor countries, as is suggested by developments in the Heckscher-Ohlin approach. Mundell (1957) first mathematically modeled cross-border capital flows, because capital is scarce in developing countries which should lead to profitable investment opportunities for capital in developing countries. On this view there should be no outflows from Africa (Sheila and Drik, 2004).

In the face of this challenge, the continent's leaders understand that the private sector must play a forward-looking role. To facilitate that, African governments are making efforts to create an enabling environment for private sector-led activity. That is why in a 2015 assessment of 51 African countries, 23 improved conditions for doing business. That is why they are also deepening the process of regional integration by courting foreign investment to build and maintain quality infrastructure (OECD, 2015).

FDI inflows to Africa remained flat at \$54 billion, decreasing in North Africa and rising in Sub-Saharan Africa. East Africa saw its FDI flows increasing by 11 per cent, to \$6.8 billion. The gas sector in the United Republic of Tanzania, which has enormous potential, drew FDI despite political wrangling over its future. In Ethiopia, the expanding textiles sector continued to attract FDI with its low wages and cheap power (OECD, 2015). Foreign Direct Investment (FDI), can be considered as the key element in Africa's economic development attempts, through supplementing domestic savings, increasing employment rate, transferring new technologies, and enhancing skills of the local manpower (Anyanwu, 2006). FDI flows to developing economies increased by 2 per cent to a historically high level in 2014, reaching \$681 billion. Developing Asia drove the increase while flows to Latin America and the Caribbean declined and those to Africa remained flat. FDI flows to Asia grew by 9 per cent to \$465 billion in 2014. East Asia, South-East Asia and South Asia all saw increased inflows. FDI in China amounted to \$129 billion, up 4 per cent from 2013, mainly because of an increase in FDI in the services sector.

FDI inflows also rose in Hong Kong (China) and Singapore. India experienced a significant increase of 22 per cent to \$34 billion. However, FDI flows to West Asia continued their downward trend in 2014 for the sixth consecutive year, decreasing by 4 per cent to \$43 billion, owing to the security situation in the region (UNCTAD,2015). As per the sample data of 84 countries during the period 1970 to1999, it is found that FDI directly or indirectly affects the economic growth of the country through its interaction with manpower.

A few number of studies has been conducted to figure out the FDI determinants in Africa, In addition to different elements, labor cost, infrastructure, market size, trade openness, political stability, exchange rate, distance from major markets, human capital development, monetary policies, fiscal and other non-tax incentives and the legal system are the main factors that can be used to attract the FDI (Khan and Bamou, 2006).The determinants of FDI in Africa in addition to different elements ,labor cost, infrastructure, Market size, trade openness, political stability, exchange rate, distance from major markets, human capital development, monetary policies, fiscal and other non-tax incentives and the legal system are the main factors that can be used to attract FDI(Khan and Bamou,2006). Market size, deregulation, political instability and exchange rate depreciation are the determinants of FDI (Wafure and Nurudeen, 2010).

In Ethiopia growth of real GDP, export orientation and liberalization determines and promote the inflow of FDI while macroeconomic instability and poor infrastructure was vice versa (Getinet & Hirut, 2006) . Trade liberalization and openness, augmenting domestic market and the return to investment, maintaining macroeconomic stability (particularly stable price level and provision of foreign exchange) and securing political stability ,improving the availability and reliability of infrastructure could favor investment in the country (Mekonen, 2008).

Haile & Assefa (2006) analyzed determinants of FDI in Ethiopia using a time series data (1974-2001) and concluded that growth of real GDP, export orientation and liberalization promote the inflow of FDI while macroeconomic instability and poor infrastructure determines the inflow of FDI. Their paper concluded that, liberalization of the trade and regulatory regimes, stable Macroeconomic and political environment, and major improvements in infrastructure are essential to attract FDI to Ethiopia. The study conducted by Asmelash (2015) about the determinates of FDI in Ethiopia showed that Infrastructure development , the domestic market

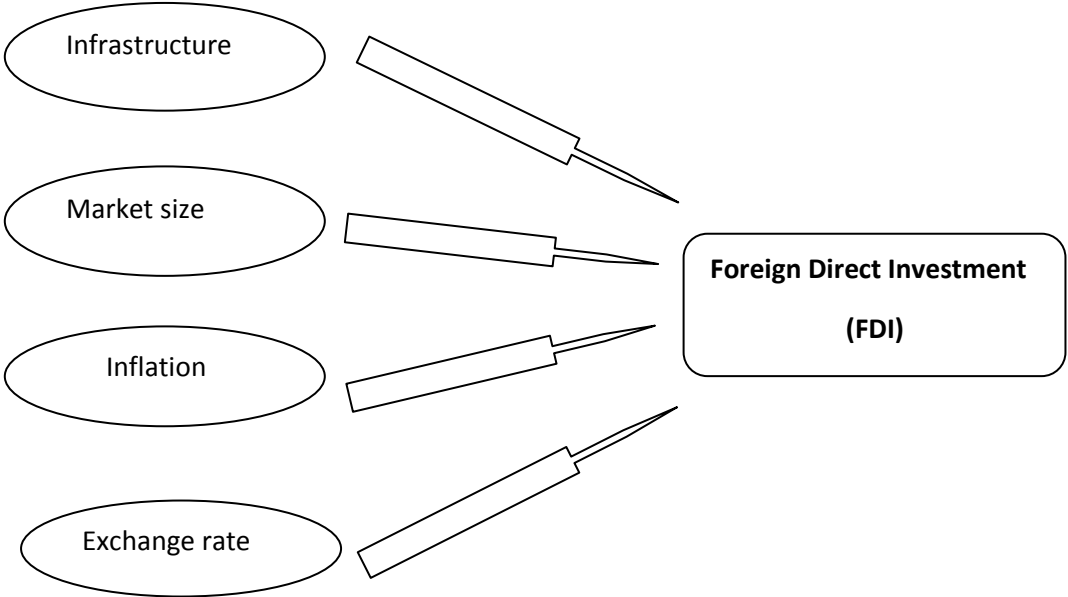
size, human capital, openness and external debt are found positively related and statistically significant while the inflation rate is negatively related and statically significant.

**2.5. Conceptual framework**

The independent variables (infrastructure, market size, inflation, tax rate & exchange rate) are hypothesized to influence the volume of FDI inflow in the country.

**Independent variables**

**Dependent variable**



**Figure 2.1:** Conceptual framework for the study

**Source:** Own construction based on literature review (2018)

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Research Design**

The paper is conducted using quantitative approach from secondary data. To be able to answer the research questions, hypothesis has been formulated. The type of research design in this study is identified as causal research design. Causal research design is conducted in order to identify the extent and nature of cause and effect relationships (Zikmund,2012). The research design will entail to the collection of data one more than one case within a given study period (1992 – 2016). Purposive sampling technique is used in order to select the best representative study area in order to meet the objective of the study.

#### **3.2 Population ,Sample size and Sampling Technique**

The general populations of this study are all the foreign investment projects that are registered under three categories (pre implementation, implementation, and operation) in the Ethiopian Investment Commission (EIC) data base. The total foreign investment project found in EIA database shows 4,950 projects. The target populations for this study are those foreign investments with operational status within the study period. Therefore the target population of the study included 2,780 foreign investors. The study included all them in the analysis.

#### **3.3 Source of Data and Data Collection Tools**

This study has been conducted using quantitative data type by collecting secondary data source. The tools used to collect the data are by directly requesting data from the concerned organization i.e the yearly amount of capital invested by foreigners in Ethiopia was collected from Ethiopian Investment Commission (EIC), exchange rate and inflation rate year data was collected from National Bank of Ethiopia (NBE), and the data for capital expenditure and gross domestic product was collected from Ministry of Finance and Economic Cooperation (MoFEC).The following variables are collected.

### 3.4 Procedures of Data Collection

**Infrastructure:** Raw data was collected from Ministry of Finance and Economic Cooperation(MOFEC).The basic physical and organizational structures and facilities like buildings, roads, power supplies need for the operation of a society or enterprise is define as infrastructure. The availability of well-developed infrastructure will reduce the cost of doing business for foreign investors and enable them to maximize the rate of return on investment (Morriset, 2001). Quality infrastructure lowers the cost of doing business and thus attracts FDI (Teressa, 2016). Capital expenditure per real GDP is used as a proxy for infrastructure.

**Market size:** Raw data was collected from Ministry of Finance and Economic Cooperation(MOFEC).Large market is necessary for efficient utilization of resource and exploitation of economics of scale (Chakarabarti, 2001). Gross domestic product is used as a proxy.

**Inflation:** The data for Ethiopia inflation rate was gathered from National Bank of Ethiopia. Inflation refers to “the sustained rise in the general level of prices of goods and services in the economy over a period of time”(McLean et al,2016).it is well known that a low and stable inflation rate reduces the uncertainty for investment decisions. And also it has effect of the profitability. So, stable inflation rate is desirable to attract foreign investment (Aijaz, Siddiqui & Aumeboonsuke, 2014).

**Exchange rate:** The data for exchange rate was gathered from National Bank of Ethiopia.Exchange rate is one of the fundamental reason that drive FDI behavior (Bloningen, 2005). An appreciation of home country currency increases profits through cheaper imported inputs on the other hand The depreciation of host country’s currency tends to stimulate FDI activity.

### 3.5 Data analysis Method

Different statistical tools were used. In trend analysis, linearity of increase or decrease over the given period of time is shown by treating all the variables (i.e FDI,EXR,INFR,INF,MKTS )as dependent variable and trend (i.e, the year the investment is operating) as independent variable. Regression analysis is a statically technique that explain the movement of dependent variable as a function of movement of other variable called independent variable. For this simple linear regression method was used after making sure that all the necessary assumptions are met

through testing. In analyzing the variables of the determinants the Dicky – Fuller test were applied. After Goodness-fit test is satisfied, multiple linear regression model has been used.

### **Model specification**

Multiple linear regression method was used, models were developed and the variables stationary were tested using Dicky Fuller test .

$$\text{Model: FDI} = \beta_0 + \beta_1 \text{inf} + \beta_2 \text{gdp} + \beta_3 \text{er} + \beta_4 \text{infr}$$

### **Unit Root Test**

Before making any econometric estimation, it is necessary to conduct a unit root test to check the stationary of variables in my model. This helps to avoid the problem of spurious regression and make meaningful estimations. I used Dicky - Fuller test to check for unit root or non-stationary of variables.

$H_0$  : there is a unit root for the series, series non stationary

$H_1$ : there is no unit root for the series, series is stationary

If P value less than 0.05, reject  $H_0$  and If P value is greater than 0.05 accept  $H_0$ .

$$\text{FDI} = f(\text{inf}, \text{gdp}, \text{infr}, \text{er})$$

Where FDI – foreign direct investment

Inf- Inflation rate

gdp- Gross domestic product

infr- Infrastructure

er- Exchange rate

Independent variables

- Inflation annual rate expressed as inf .testing the macroeconomic stability and the expected sign is either ‘-’ or ‘+’.
- Gross domestic product at current price expressed as gdpr. It is taken as a proxy for market size testing for market size/growth the expected sign is ‘+’.



- Infrastructure expressed as  $\ln fr$ , the ratio of capital expenditure and gross domestic product is taken as a proxy for infrastructure the expected sign is '+’.
- Exchange rate fluctuation expressed as  $oer$ , testing the macroeconomic instability the expected sign is either ‘-’ or ‘+’.

Test of significance using P value is presented in chapter four. P value is used to determine if there is a significant relationship between the independent variable and the dependent variable. In order to test the significant statics, the comparison between the of P value to 5% with 95% confidence interval.

Therefore the decision rule is at 95% confidence interval:

P value < 5%, accept H1

P vaue > 5% , accept H0

where  $H_0$  – when the variable is not statistically significant, the null hypothesis will be accepted

$H_1$  – when the variable is statistically significant, the alternative hypothesis will be accepted

Also test of correlation has been undertaken in order to measure the linear association between independent and dependent variables.  $R^2$  can be used to the test the entire regression of the equation. The value of R- square is range from 0 to 100. If the value is 100 it indicates that the independent variable explain 100% of the variability of the dependent variable ,if it the value is 0 it indicates weak relationship between dependent and independent variables and if it close to 100 it indicates strong relationship between the dependent and independent variables.

### 3.6 Ethical Considerations

This research paper has considered the following ethical issues before, on progress and after the research was conducted. Data gathered in process of the study were kept confidential and are not to be used for any personal interest and the whole process of the study is controlled to be within acceptable professional ethics. The research ethical code of plagiarism was respected and all source of information and materials consulted for the study were acknowledged.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter discusses the results of the study. The trend is discussed using graph and linear regression interpretation. Determinates are discussed using regression analysis and interpretation is presented.

#### 4.2 Descriptive Statistics and Trend Analysis Findings of the study

In this section the researcher discuss the information gathered from secondary data. The trend of foreign direct investment in Ethiopia From 1992–2016 and it was intended to find out and identify the determinants for attracting Foreign Direct investment in the Ethiopian economy.

##### 4.2.1 Descriptive Statistics of the Dependent and Independent Variables

Data is collected for both dependent variable and independent variables that covers the study period 1992-2016. The descriptive summary of the variables is summarized in the table below which includes mean, standard deviation, minimum/maximum value .

**Table 4.1.** Summary of the descriptive statistics of the study variables using time series data from 1992-2016.

<b>Variables</b>	<b>Mean</b>	<b>Std.Dev.</b>	<b>Min</b>	<b>Max</b>
FDI	4025979	4128773	57276	1.40E+07
INF	9.2572	13.7352	-10.77	55.24
GDP	340165.9	205012.6	130749	810187
EXR	11.0852	5.558701	2.8	22.41
INFR	0.0536	0.033526	0.01	0.12

**Source:** Own construction based data from EIC,NBE and MOFEC,2018

As shown above in the table 4.1, The annual capital flow of FDI ranges between Birr 4,025,979 (in 1996) million and 14 billion (in 2011) indicating the minimum and maximum capital flows. The average capital of FDI is Birr 4,025,979 million and each observation is deviated from this average by the value of Birr 4,128,773 million over the given study period. The inflation rate ranges between minimum value -10.77 and maximum 55.24( in 2001 and 2008 respectively ) with a mean value of 9.25 and each observation deviated from this average by the value of 13.73. The market size which is proxied by GDP ranges between minimum value of birr 130,749 (in 1992) and the maximum value of Birr 810,187 (in 2016) with mean value of Birr 340,165.9 and deviation of Birr 205,012.6. Exchange rate has a result minimum value 2.8 (in 1992) and maximum value 22.41 (in 2016) with average 11.08 and deviation of 5.56rate. The infrastructure proxied by ratio of capital expenditure and GDP has a minimum value of 1% (in 1992) and maximum value of 12%( in 2010) with mean value of 5% and standard deviation of 3%.

#### 4.2.2 Trend Analysis

##### Dependent variable

The finding of the trend of Foreign Direct Investment in Ethiopia was analyzed between time /year and FDI by treating time/1992–2016/ as independent variable and inflow of FDI as dependent variable. The table below shows the result of simple linear regression. It shows that FDI is growing on average by 0.87%.

**Table 4.2** log-lin relationship between year and FDI data from,1992-2016

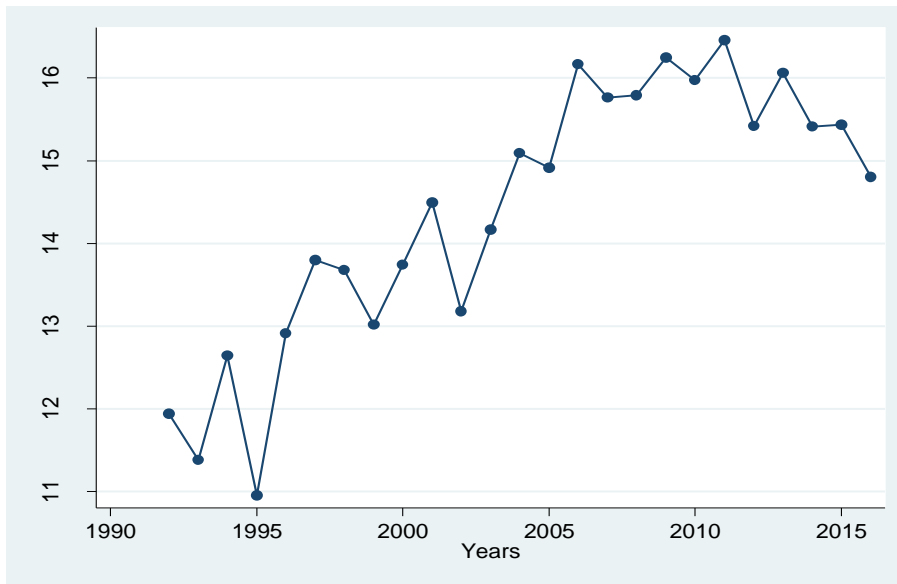
	b coefficient	Trend equation
lnfdi	0.87	$\text{Lnfdi} = 1833.5 + 0.87t$

Source: EIC data log-lin regression, 2018

As it can be understood from the graph below that the trend of FDI in Ethiopia has lots of ups and downs pattern throughout the study period. Due to unfavorable economic conditions during Derg regime Ethiopia has lost lots of benefits that would have been benefited from investment specifically foreign investment. after the end of civil war the current government was raised which is 1991.the command economic system was changed with liberalized economic system. The transitional government adopted the agriculture development led industrialization and the government introduced different policy reform measures .Among the policy reforms are the structural adjustment programs (SAP) advocated by the international monetary fund and world bank which was one of the significant policy reforms. The program objectives were reducing macroeconomic distortions, improving efficiency in resource utilization and productive capacity of the economy, focuses on stabilization and adjustment policies.

The main structural adjustment policy measures undertaken In Ethiopia are policies related exchange rate, monetary system, interest rate, government fiscal position, transport deregulation and investment.

In the first few years there was likely a fear on foreigners investors to invest in Ethiopia. Government has tried to show its commitment in order for the investors to be comfortable to invest. proclamation No. 15/1992, 7/1996, 37/1996, 35/1998, 36/1998 and 116/1998. In combination, these establishes the economic sectors open to FDI. It was enhanced by the government in order to attract more FDI. But still it was not easy and was not successful as a result there existed low performance until 1996.Still as we can easily understand from the graph the performance does not follow



a sustained pattern.

**Graph 4.1:** Trends of FDI Inflows to Ethiopia (1992–2016)

**Source:** Own construction from regression (2018)

The FDI inflow from 1992–1996 was very negligible. Since, the country was in transition politically the economic condition was unfavorable, Ethiopia lost the benefits that should have been obtained from FDI. 1999 – 2000 the inflow of FDI fallen because of Ethiopia and Eritrea war. Then it rose and then declined sharply in 2001 severe drought has occurred and picked up again in 2002–2006 increment of FDI, with a slightly decrement in 2005. In 2007 and 2008, it declines again as reason of global financial and economic crises. 2009–2011 it is increasing with decrement in 2010. Starting from 2012, FDI falls in huge amount and is tried to recover in 2013 and then continues to decline.

### **Independent variables**

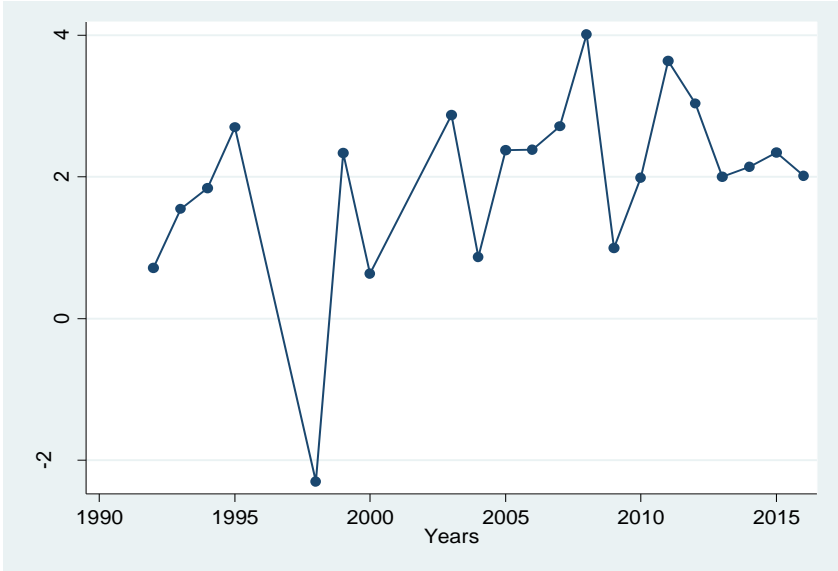
The table below shows the summary result of simple linear regression between time /year and Independent variables. Treating time/1992–2016/ as independent variable and INF,GDP(proxy for market size),EXR and INFR as dependent variable in order to see the trend of each variable within the given period of time.

The result shows that inflation rate is growing on average by 0.7%,Gross domestic product proxy of market size shows that it is growing on average by 8.56%,the exchange rate coefficient shows that it is growing by 1.22% and infrastructure is growing by 0.96% on average.

**Table 4.3** log-lin relationship between year and INF,GDP(proxy of Market size),EXR and INFR data from,1992-2016

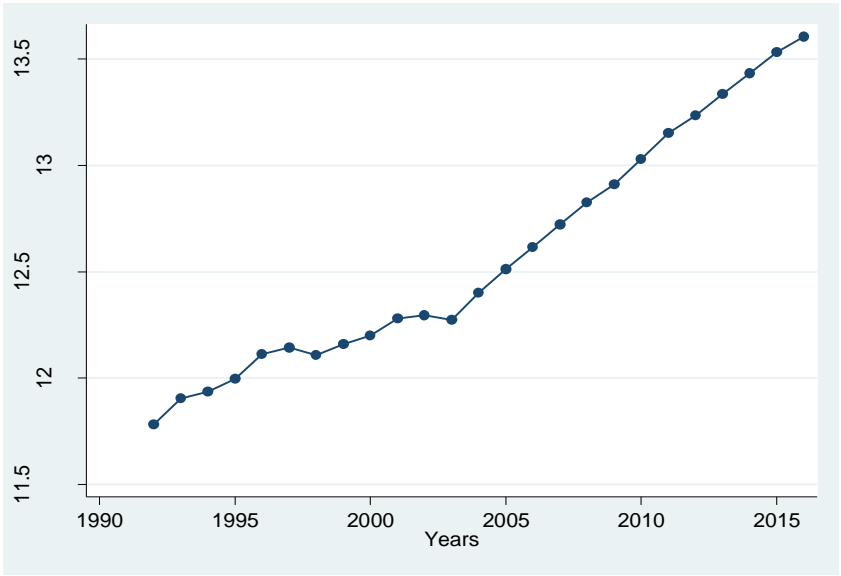
	b ceficient	Trend equation
lninf	0.074	$\ln INF = 1833.503 + 0.074t$
lngdp	8.56	$\ln GDP = 1.833.5 + 8.58 t$
lnexr	1.22	$\ln EXR = 1833.5 + 1.22t$
linfr	0.96	$\ln INFR = 1833.5 + 0.96t$

Source:MOFEC,NBE data log-lin regression,2018



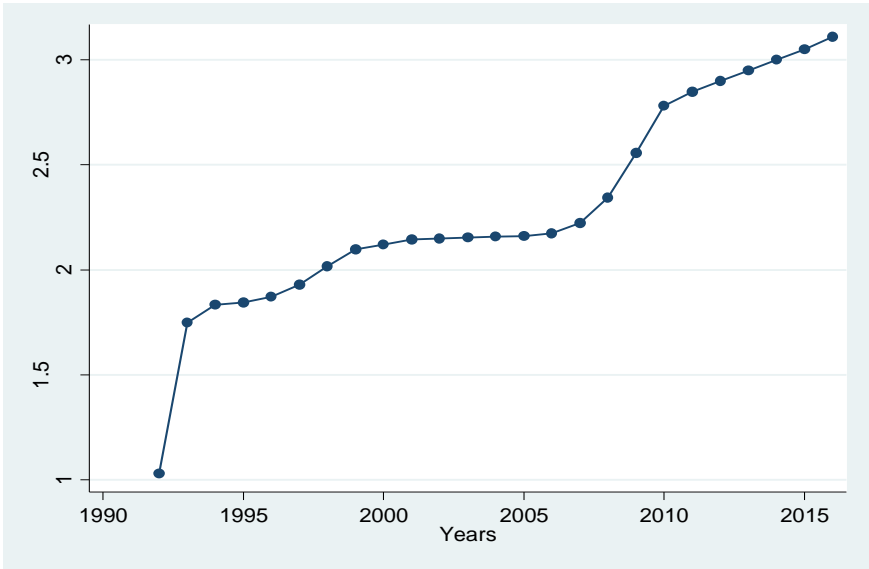
**Graph 4.2:** Trend of INF (1992–2016)

Source: Own estimation (2018)



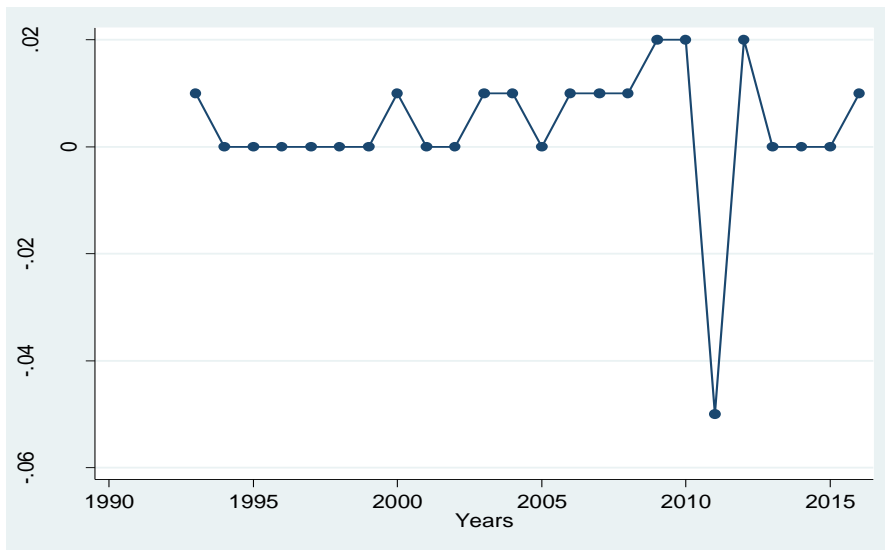
**Graph 4.3:** Trend market size (1992–2016)

**Source:** Own estimation (2018)



**Graph 4.5:** Trend of EXR (1992–2016)

**Source:** Own estimation (2018)



**Graph 4.6:** Trends of INFRA (1992–2016)

**Source:** Own estimation (2018)

### 4.2.3 Determinants of FDI in Ethiopia

#### Goodness of fit test

The aim of goodness of fit test is to measure the reliability and validity of the variables which are understudy. Unit root test was conducted using Dicky- Fuller test in which the result indicates the data series are smaller than the critical values at level and their first difference which leads to rearrange the models with this level and difference.



**Table 4.4** Dickey-Fuller test for unit for all the variables

D.dlnfdi	Coef	st.err	t	p >  t	[95% Conf. Interval]	No.obser
dlnfdi	-1.4974	0.1900	-7.88	0.00	-1.8926 -1.1021	23
L1.						
D.lninf	coef	st.err	T	p >  t	[95% Conf. Interval]	No.obser
inf	-1.0351	0.1584	-6.53	0.000	-1.3710 -0.6993	18
L1.						
D.dlngdp	coef	st.err	T	p >  t	[95% Conf. Interval]	No.obser
dlnngdp	-.7081	0.2029	-3.49	0.002	-1.1303 -0.2860	23
L1.						
D.dlnexr	coef	st.err	T	p >  t	[95% Conf. Interval]	No.obser
dlnexr	-.8616	0.0808	-10.66	0.000	-.1029 -.6936	23
L1.						
D.dlninfra	coef	st.err	T	p >  t	[95% Conf. Interval]	No.obser
dlninfr	-1.3343	.2056	-6.49	0.000	-1.7620 -.9067	23
L1.						

**Source:** Own construction from regression result (2018)

The conclusion that may be drawn from the above results is that all the variables are stationary (in its differenced form). Therefore, we can reject the null hypothesis. One of the objectives that this study examined is the determinates of foreign direct investment in Ethiopia.

The study shows various variables which either encourage or discourage the inflow of foreign investment. They are inflation rate, gross domestic product which is taken as proxy for market size, the ratio of capital expenditure and gross domestic product is taken as a proxy for infrastructure and exchange rate. Taking FDI as a dependent variable and the rest as independent variables a regression analysis are conducted. The results are discussed below. To examine the relationship among the dependent and independent variables, regression analysis was undertaken by the coefficient from the regression result.

### **1) Inflation rate**

H0: Inflation rate do not have a favorable effect on FDI

H1: Inflation rate have a favorable effect on FDI

. The coefficient for inflation is -0.1, meaning that for a unit increase in inflation we expect a 0.1 unit decrease in FDI, holding other variable constant. The R-square is 0.54 indicates that approximately strong relationship between the FDI and inflation rate. But, the p value shows statistical insignificant at 5 % with 95% confidence interval.. Therefore the study has accepted the null hypothesis.

### **2) Market size**

H0: the market size do not have a favorable effect on FDI

H1: the market size have a favorable effect on FDI

The coefficient is 20.74 ,meaning that for a unit increase in GDP we expect a 20.74 unit increase in FDI, holding other variables constant. The market size which GDP was taken as a proxy The R-square is 0.54 indicates that approximately strong relationship between the FDI and market size. statistical significant at 5 % with 95% confidence which it was expected .Therefore the study rejected null hypothesis.

The growth of market size will allow achieving dynamic growth in the future, so that the market size of the host country and it growth play a significant role in determining the inward flow of FDI. Market size has by far been a single most widely accepted significant determinant of FDI flows (Chakarbatrri,2000).Similarly, positive and significant effect of market size on the flow of FDI is found in the studies of Marija (20117) and Rozina( 2016).

### **3) Infrastructure**

H0: Infrastructure do not have a favorable effect on FDI

H1: Infrastructure have a favorable effect on FDI

The coefficient is 7.8 ,meaning that for a unit increase in infrastructure we expect a 7.8 unit increase in FDI, holding other variables constant. Infrastructure which the ratio of capital expenditure and gross domestic product as a proxy. The R-square is 0.54 indicates that approximately strong relationship between the FDI and infrastructure. But, statistically

insignificant at 5% with 95% confidence interval which is not expected. Therefore the study accepted the null hypothesis.

#### 4) Exchange rate

H0: exchange rate do not have a favorable effect on FDI

H1: exchange rate have a favorable effect on FDI

The coefficient is -5.20 ,meaning that for a unit increase in exchange rate we expect a 5.20 unit decrease in FDI, holding other variables constant. The R-square is 0.54 indicates that approximately strong relationship between the FDI and exchange rate .Exchange rate has a result of negative relationship and significant at 5 % with 95% confidence which it was expected.

Therefore the study rejected the null hypothesis. Similarly, study conducted by Rozina (2016) found that exchange rate have an adverse effect of inflow of FDI. volatility in exchange rate has a significantly negative impact on FDI inflow (Kyereboah and Agyire,2008).

**Table 4.5:** Estimation Results of the Regression Function

<u>Infdi  </u>	<u>Coef.</u>	<u>Std. Err.</u>	<u>t</u>	<u>P&gt; t </u>	<u>[95% Conf. Interval]</u>	
lninf	-.1052181	.2905632	-0.36	0.722	-.724539	.5141027
dlngdpt	20.74443	8.460731	2.45	0.027	2.710814	38.77805
dlnoer	-5.205662	2.225179	-2.34	0.034	-9.948519	-.462805
dlninfrt	7.898429	22.75561	0.35	0.733	-40.60401	56.40087
_cons	13.7035	.7275901	18.83	0.000	12.15268	15.25432

Source: Own estimation (2018)

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.1 Summary

Since the reforms began in 1991 the government has made a numerous pronouncements indicating its interest to attract private investment particularly foreign direct investment. There is a controversy about the intention of foreign investors. They come to a country hoping to make more profit than at home, not for charity. The concerned question for the host country is to understand the factors that attract these investors in order to make it attractive. The more liberalized the country's economy, the more encouraging the socio - economic setting for foreign investors.

Therefore, the Ethiopian government has opened several economic sectors to foreign investors and issued several investment incentives for both domestic and foreign investor. The major incentives given to foreign direct investors include exemption from payment of export customs duties, income tax holidays depending on the region and the sectors of the investment, exemption of imported capital good and spare parts to some level of percentage, also foreign inventors can carry forward their initial operating losses. Investors who are engaged in some sectors are entitled to income tax exemptions for a specific period. In addition the investment code provides guarantee for repatriation of capital, interest payments on foreign loans, profit, dividends, asset sell proceeds and technology transfer payments.

#### 5.2 Conclusion

The main objective of the study is to investigate the trend and determinates of inflow of FDI in Ethiopia from 1996-2016 using annual data. Both theoretical and empirical literature was reviewed. This study applied multiple linear regression models. Macro level variables were used. The independent variables are inflation, market size ,infrastructure exchange rate, and tax rate.FDI as dependent variable. The growth of market size affect FDI favorably which gross domestic product was taken as proxy was resulted positive and significant. And negatively by exchange rate.

Ethiopia with more than 90 million population looks attractive because market size is one of the main variable that attracts FDI but still the basic point here is the true value or the growth rate of the market is the one that really determines the inflow of FDI, the positive and significant of exchange rate encourages the FDI investment by decreasing the cost of investment. Although it has shown significant increment since 2013, FDI inflows to Ethiopia was significantly low and showed no steady trend historically.

### **5.3 Recommendation**

In general, the research recommends the following in order to increase the flow of Foreign direct investment in Ethiopia.

- The government should really concentrate on main matters that hinder the inflow of FDI then practice and implement strategies that should encourage and be suitable for foreigners to invest.
- The government should focus in openness of foreign trade ,this will lead to competitiveness in the market as a result domestic and foreign enterprise will be motivated to increase their participation.
- The government should continuously pay attention towards macroeconomic instability mainly the exchange rates of the nation which adversely affect the flow of FDI.

Finally, there are still more questions that this research could not answer about the subject matter. Those other questions are left for further researches. In addition, this paper is also limited by specific time period.

## References

- Abdoul, G.M., (2012). What Drives Foreign Direct Investment in Africa?, unempirical Investigation with Panel Data.
- Atlaaw et al (2014). Determinants of Foreign Direct Investment: Reflections from Ethiopia. Research Review Ethiopia. V.2 (1),p.85-95
- Agrawal, S. (2012).Foreign Direct Investment in India. International Journal of Computation Engineering & Management,V.15(5),93-105.
- Hejazi W. and Safarian. A.J (1999).Trade, Foreign Direct Investment, and R&D spillovers. Journal of International Business Studies,V.30(3) pp491-511
- Henok,A., Derk,B., and Dan, C..(2012). Ethiopian Investment Prospects: A sectoral scan.”Trend and Development Discussion paper no.02/2012,Munich.
- Mohammed Ameen (2015).The Role of FDI in lflows in Economic Growth: Time Series analysis.Malaysia,V.23,p1558-1556.
- Accolley, D. & Pearlman J. (1997). The Determinants and Impact of Foreign Direct investment. London: London Metropolitan University
- Ahmed Mohammad(2015).The determinants of Foreign Direct Investment ,Empirical Evidence, Bahrain
- Aijaz,H ,Siddiqui, A., & Aumeboonsuke,V.(2014) Anyanwu, Role of Interest Rate in Attracting the FDI :Study on Asean 5 Economy. International Journal of Technical Research,2(3),p59-70
- Asiedu, E. (2002). On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different? World Development, Vol.30, No.1, pp.107-119.
- Ayanwale, A.B. (2007): FDI and Economic Growth: Evidence from Nigeria, African Economic Research Consortium (AERC), Research Paper, Nairobi.
- Berhanu Nega (1999).Foreign Direct Investment in Ethiopia. Economic Focus Vol. 2, no.3
- Berhanu, 1998). Domestic Industry and International Competition, In Alemayehu Geda (ed.) Vol. 2, no.3

- Berhanu, N. (1999). Foreign Direct Investment in Ethiopia. Economic Focus, In Alemayehu Geda (ed.) Vol. 2, No. 3.
- Bloigen, B., (2005). A Review of the Empirical Literature on FDI Determinates: Atlantic Economic Journal, V.33(4), 383-403.
- Blomstrom, M. (1986), "Foreign direct investment and productive efficiency: the case of Mexico", Journal of Industrial Economics, 15: 97 – 110.
- Blomstrom Magnus and Kokko Ari (2001). FDI and Human Capital: A Research Agenda. Stockholm School of Economics, organized by the OECD Development Center.
- Borensztein, Grego et al. (1998). How does foreign direct investment affect growth? Journal of International Economics.
- Borensztein, Grego et al. (1998). How does foreign direct investment affect growth? Journal of International Economics 45 (1).
- Chakrabarti, A (2001). The determinant of foreign direct investment: Sensitivity analysis of cross- country regression. 54(1), 89-114
- Duning, J. (1988). The Eclectic Paradigm of International Production: A Restatement and some Possible Extensions. Journal of International Business Studies. V 11(2):9-22.
- Dunning J. H. (1993). Multinational Enterprises and the Global Economy . Wokingham, U.K: Addison Wesley publishing company.
- Dyllick, Thomas and Muff, Katrin (2016). Clarifying the Meaning of Sustainable Business: Introducing a Typology from Business-as-usual to True Business Sustainability. V29(2), 1086-1096.
- Fayyaz, H., Constance, K.K. (2012). Determinates of Foreign Direct Investment flows to Developing Countries.
- Getenet, A. and Hirut A. (2005), Determinants of Foreign Direct Investment in Ethiopia: A time Series Analysis. London: Policy Studies Institute.
- Getenet, A. and Hirut A. (2005). Determinants of Foreign Direct Investment in Ethiopia: A time Series Analysis. London: Policy Studies Institute.

- Goldberg ,Linda S. and Kelin Micheal W.(1997).Foreign Direct Investment, Trade and Real Exchange Rate Linkages in South East Asia and Latin America. Working paper. USA.
- Haile, G. and Assefa, H. (2006). Determinants of Foreign Direct Investment in Ethiopia: A time-series analysis. University of Westminster.
- IMF(2016). Foreign Direct Investment :Trends Data Availability Concepts and Recording Practices.” Report No. 13/308.
- John, C.A.(2012). Why Does FDI go where it goes?: New Evidence from African Countries: Analysis of Economics and Finance: V.13(2),425-462.
- Khan S.A. & Baou, L. T. (2006). An analysis of foreign direct Investment flows to Cameroon. African economic research consortium, Nairobi, Kenya.
- Kyereboah-Coleman, A. and Agyire- Tettey, K.F.(2008)Effect of exchange rate volatility on foreign direct investment in sub –Saharan Africa: The case of Ghana.
- Lipsey, R.,( 2001). Foreign direct investors in three financial crises, Working Paper, No. 8084, National Bureau of Economic Research.
- Marija (20117),Market size as a determinant of the foreign direct investment inflows in the western Balkans countries, paper study
- Mencinger (2003). Does Foreign Direct Investment always enhance economic growth?: short survey of recent empirical studies. Solvenia, University of Ljubljana.
- Mekonnen, A. (2008).Performance and Main Determinants of Investment in Ethiopia. MSc. Thesis, University of Kent.
- Morriset, Jacques (2001). How Tax Policy and Incentives affect FDI
- Naude, W.A. And W.F. Krugell (2007). Investigating Geography and Institution as Determinates of Foreign direct Investment in Africa using panel data. Applied Eoomics, vol,39,no.10, pp1223-1233 .
- Nunnenkamp, P. (2001) : Foreign direct investment in developing countries: What policymakers should not do and what economists don't know.



- OECD(2002).Measures of Restrictions on Inward Foreign Direct Investment for OECD countries: Economics studies.
- OECD (2017). International Trade, Foreign Direct Investment and Global Value Chains.
- Romer, P. (1993).Idea gaps and object gaps in economic development. Journal of Monetary Economics 32, No.3 .
- Rozina (2016).Determinant of Foreign Direct Investment in Ethiopia: Time series analysis  
Indra Gandhi National Open University.
- Solomon, M. (2008).Determinant of foreign Direct Investment in Ethiopia, Maastricht Graduate School of Governance, Netherland.
- Thomas A. & Peter H. (2000).International Economics, 11th edition. USA: McGraw- Hill Companies, Inc.
- UNCTAD (2004): An investment Guide to Ethiopia, Opportunities, and Conditions, The International Champers of Commerce, The World Business Organization
- UNCTAD (1999). Foreign Direct investment in Africa: performance and Potential. New York and Geneva: United Nations.
- UNCTAD (2004). World Investment Report 2004: The Shift towards Services. New York and Geneva: United Nations.
- UNCTAD (2007). World investment report - Transnational corporations, Extractive Challenge of Development, United Nations Conference on Trade and Investment. New York and Geneva: United Nations.
- UNCTAD (1988).World Investment Report: Trends and Determinantes. New York and Geneva: United Nations.
- UNCTAD,2015).World Investment Report, Reforming International Investment Governanace. New York and Geneva: United Nations.
- WTO (2012).Trade and Public Policies:A Closer Look at Non-Tariff Measurment in the 21<sup>st</sup>Century.
- UNCTAD (2016).World Trade Statistical Review. New York and Geneva: United Nations.

WTO (1996). Trade and Foreign Direct Investment.

XU, B.(2000). Multinational Enterprises, Technology Diffusion and Host Country Productivity Growth. Journal of Development Economics,V.62 , 447-493.

Xing Yuqing & Pradhananga Manisha ( 2013).How Important is Export and FDI for China Economic Growth.

Zbida (2010). Analysis Foreign Direct Investment in Hungary, Szen Isvan University, Hungary.

## APPENDIX

### Summary of Data

Years	FDI	CAPEX	INF	GDPT	OER	INFRT
1992	153,876.10	1,784.90	2.05	130,749.16	2.8	0.01
1993	87,657.60	2,694.40	4.71	147,984.22	5.74	0.02
1994	309,399.40	3,156.40	6.29	152,704.87	6.25	0.02
1995	57,276.23	3,705.40	14.84	162,061.88	6.32	0.02
1996	406,450.92	4,299.80	-9	182,199.97	6.5	0.02
1997	983,980.53	4,265.10	-2.65	187,909.97	6.88	0.02
1998	870,014.00	4,430.20	0.1	181,411.76	7.51	0.02
1999	449,113.50	3,441.90	10.39	190,776.50	8.14	0.02
2000	928,901.58	5,003.00	1.89	198,827.10	8.33	0.03
2001	1,977,861.55	6,130.30	-10.77	215,332.60	8.54	0.03
2002	530,099.03	6,313.40	-1.22	218,594.30	8.58	0.03
2003	1,426,479.65	8,271.30	17.77	213,870.30	8.62	0.04
2004	3,581,906.94	11,343.40	2.38	242,897.60	8.65	0.05
2005	3,012,750.80	14,041.80	10.75	271,605.20	8.68	0.05
2006	10,478,683.71	18,398.00	10.82	301,032.70	8.79	0.06
2007	7,032,071.05	24,121.00	15.1	335,519.00	9.24	0.07
2008	7,202,112.79	30,598.70	55.24	371,716.70	10.42	0.08
2009	11,369,402.01	40,060.70	2.71	404,437.00	12.89	0.1
2010	8,648,599.40	53,296.70	7.32	455,196.00	16.12	0.12
2011	14,021,639.91	35,986.77	38.04	515,078.54	17.25	0.07
2012	4,974,563.53	48,078.17	20.8	559,621.57	18.19	0.09
2013	9,443,143.55	54,466.16	7.39	618,842.23	19.07	0.09
2014	4,950,687.27	64,321.73	8.5	682,358.51	20.1	0.09
2015	5,068,547.15	66,990.22	10.45	753,229.74	21.11	0.09
2016	2,684,250.40	84,300.73	7.53	810,187.25	22.41	0.1

## Stationary Tests

```
. dfuller dlnfdi, regress lags(0)
```

Dickey-Fuller test for unit root                      Number of obs =    23

Test Statistic	----- Interpolated Dickey-Fuller -----		
	1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	-7.878	-3.750	-2.630

MacKinnon approximate p-value for Z(t) = 0.0000

D.dlnfdi	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
dlnfdi						
L1.	-1.497418	.1900641	-7.88	0.000	-1.892677	-1.102158
_cons	.2243487	.1711463	1.31	0.204	-.1315696	.580267

```
. dfuller lninf, regress lags(0)
```

Dickey-Fuller test for unit root                      Number of obs =    18

Test Statistic	----- Interpolated Dickey-Fuller -----		
	1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	-6.534	-3.750	-2.630

MacKinnon approximate p-value for Z(t) = 0.0000

D.lninf	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lninf						
L1.	-1.035194	.1584362	-6.53	0.000	-1.371064	-.6993246
_cons	2.26834	.3778563	6.00	0.000	1.467321	3.06936

```
. dfuller dlngdpt, regress lags(0)
```

Dickey-Fuller test for unit root                      Number of obs = 23

Test Statistic	----- Interpolated Dickey-Fuller -----		
	1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	-3.489	-3.750	-2.630

MacKinnon approximate p-value for Z(t) = 0.0083

D.dlmgdpt	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
dlmgdpt						
L1.	-.7081929	.2029876	-3.49	0.002	-1.130329	-.2860572
_cons	.0517035	.0180205	2.87	0.009	.0142278	.0891792

. dfuller dlnoer, regress lags(0)

Dickey-Fuller test for unit root                      Number of obs = 23

Test Statistic	----- Interpolated Dickey-Fuller -----		
	1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	-10.664	-3.750	-2.630

MacKinnon approximate p-value for Z(t) = 0.0000

D.dlnoer	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
dlnoer						
L1.	-.8616954	.0808049	-10.66	0.000	-1.029738	-.6936524
_cons	.047072	.0137835	3.42	0.003	.0184076	.0757363

. dfuller dlminfrt, regress lags(0)

Dickey-Fuller test for unit root                      Number of obs = 23

----- Interpolated Dickey-Fuller -----					
Test	1% Critical	5% Critical	10% Critical		
Statistic	Value	Value	Value		
Z(t)	-6.488	-3.750	-3.000	-2.630	
-----					
MacKinnon approximate p-value for Z(t) = 0.0000					
-----					
D.dlninfrt	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
-----					
dlninfrt					
L1.	-1.334388	.2056563	-6.49	0.000	-1.762074 - .9067025
_cons	.0046414	.0028445	1.63	0.118	-.0012741 .0105568

### Descriptive Statics

stats	fdi	inf	gdpt	exr	infrt
mean	4025979	9.2572	340165.9	324541.6	.0536
N	25	25	25	25	25
max	1.40e+07	55.24	810187	1528044	.12
min	57276	-10.77	130749	29407	.01
sd	4128773	13.7352	205012.6	433158.2	.0335261
variance	1.70e+13	188.6556	4.20e+10	1.88e+11	.001124
cv	1.025533	1.483731	.6026841	1.3346	.6254871
se(mean)	825754.5	2.747039	41002.52	1.11174	0 .0067052

Sources: EIC,MOFEC,NBE Data

. log-lin relationship					
Source	SS	df	MS	Number of obs =	21

-----+-----							F( 5, 15) = 238.27
Model		1140.5916	5	228.118319			Prob > F = 0.0000
Residual		14.3607859	15	.957385725			R-squared = 0.9876
-----+-----							Adj R-squared = 0.9834
Total		1154.95238	20	57.747619			Root MSE = .97846
-----							
years		Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
-----+-----							
lnfdi		.8766455	.303381	2.89	0.011	.2300043	1.523287
lninf		.0747403	.1907181	0.39	0.701	-.3317657	.4812464
lngdpt		8.586402	1.368635	6.27	0.000	5.669226	11.50358
lnoer		1.22672	1.420962	0.86	0.402	-1.801988	4.255429
lninftrt		.9610865	1.110651	0.87	0.400	-1.40621	3.328384
_cons		1883.503	17.49388	107.67	0.000	1846.216	1920.791
-----							