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Determinants of Foreign Direct Investment in Ethiopia

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Statement of Certification

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

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Acronyms

ADLI	Agricultural Development Led Industrialization
AfDB	African Development Bank
CPI	Consumer Price Index
CUTS	Consumer Unity and Trust Society
EIC	Ethiopian Investment Commission
EPA	Ethiopia Privatization Agency
EPDRF	Ethiopian People Democratic Republic Front
ESA	Ethiopian Statistical Agency
FDI	Foreign Direct Investment
FDRE	Federal Democratic Republic of Ethiopia
GDP	Gross Domestic Product
GDPPC	Gross Domestic Product per Capita
MNCs	Multinational Companies
NBE	National Bank of Ethiopia

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OECD	Organization for Economic Commissions and Development
RIOs	Regional Investment Offices
SADC	South African Development Countries
SSA	Sub-Saharan Africa
TNCs	Transnational Corporations
TPLF	Tigray Peoples Liberal Front
UNCTAD	United Nations Conference on Trade and Development.
WDI	World Development Indicators
WIR	*World Investment Report*

CHAPTER ONE: Back Ground of the Study

1.1. Introduction

The significance of foreign direct investment (FDI) flows is well documented in literature for both the developing and developed countries. Over the last decades FDI have grown at least twice as rapidly as trade (Meyer, 2003). As it has been shown on the World Investment Report (WIR) among the developing and transition countries those grew faster are receiving bigger amount of FDI (UNCTAD, 2002). On the other angle the emergence of one percent in FDI (measured as a proportion of GDP) results in an increase in per capita income of about 0.8 percent (Bergsman, et al., 2000). As there is shortage of capital in the developing countries, which need capital for their development process, the marginal productivity of capital is higher in these countries. On the other hand investors in the developed world seek higher returns for their capital. Hence, there is a mutual benefit in the international movement of capital.

The ongoing process of integration of the world economy and liberalization of the economies in many developing countries has led to strong competition for inward FDI in these countries. The controls and restrictions over the entry and operations of foreign firms in these countries are being replaced by various economic reforms aimed at FDI is assumed to bring at least four things of value; financial capital,

management skills, technology and access to export markets and therefore helps to sustain growth.

Accordingly in the early 1990s the current government of Ethiopia (TPLF/EPRDF) has designed liberalization program which create favorable condition for the inflow of FDI. The reforms as well as the government introduction of investment guarantee schemes and incentives have helped to raise the number of investment projects and capital flows year after year. In the year 1992 there are only five projects with 241,534 birr capital flows but currently this figure is dramatically increased to 639 approved projects with more than 94 million capitals in the year 2007. Moreover, with the aim of increasing the role of the private sector in the economy the government started the privatization program in 1994, thus establishing the Ethiopian Privatization Agency (EPA), which has the power and duties to transfer state-owned enterprises to private ownership.

Starting 1996, with the objective of promoting private investment and the flow of foreign investment; a series of investment proclamations has been issued and since then the government has gradually liberalized its trade and investment regimes by providing generous trade and fiscal incentives to foreign investors through number of tax concessions, credit facilities and tariff reduction and have eased foreign exchange controls.

1.2. Overview of Recent Economic Development and FDI Performance and Policies in Ethiopia-The Post 1991

Ethiopia has pursued a market oriented economic policy since 1992. It has also adopted an Agricultural Development Led Industrialization (ADLI) strategy as the basis for economic growth of the country with main objective of bringing about structural transformation in Agriculture, to streamline and reconstruct the manufacturing sector via extensive use of the country's natural and human resources.

Structurally, there are two major players in the Ethiopian economy: the private sector and the public. The country's economy is predominantly agrarian which is highly dependent on subsistence agriculture. Hence, the economic performance in general is dependent to a significant degree on the weather condition. But most recently, promising results have been registered in utilizing irrigation both in small farms and large farms. The role of the private sector involvement in the economy is increasing from time to time and small scale farming is increasingly becoming market oriented. The role of government in direct production is becoming less and less.

The Federal Democratic Republic of Ethiopia (FDRE) has been keenly aware of the importance of privatization and has in place a substantial privatization program since 1995. It has embarked upon the privatization of state-owned enterprises as an integral part of the broader macro- economic reform. The privatization program aims at

changing the highly centralized economic system into a market-oriented one, by recognizing the role of the private sector in generating economic growth. Domestic and Foreign investors are encouraged to participate in the privatization process which is well under way in Ethiopia at present. To accomplish the privatization process, the Ethiopian privatization Agency (EPA) was established in February 1994 by Proclamation No. 87/1994.

Since then, 195 units and whole enterprises have been privatized and transferred to domestic and foreign investors. Over the coming few years, EPA planned to privatize 117 public enterprises. The necessary preparations are underway for the privatization of 81 enterprises with the help of internationally known foreign consultants and 36 others on which preparatory work was carried out by the in-house staff.

The economy has shown an annual growth of 11.4% in the year 2006/07 and the annual average growth rate at constant price was 11.7% for the period from 2003/04 to 2006/07. The growth of Ethiopian economy is forecasted to continue at a rate of 10.8% in 2007/08.

Export of the country has shown tremendous growth during the past sixteen years since 1991. The total value exports of goods increased from 543.01 million USD in 1991 to 2,104.9 million USD in 2006 registering overall growth of 287.64 percent.

A foreign investor is allowed to invest in all sectors except those reserved for Government, Ethiopian nationals and other domestic investors. The areas of investment exclusively reserved for domestic investors include 'hotels other than those star-designated, motels, pensions, tea rooms, coffee shops, bars, night clubs and restaurants excluding international and specialized restaurants' as well as travel agency, trade auxiliary and ticket selling services, and air transport services using aircraft with a seating capacity of up to 20 passengers. A foreign investor, who intends to invest on his/her own, is required to invest not less than $100,000 in cash and/or in kind as an initial investment capital per project.

Investment Administration Organs in Ethiopia

The Ethiopian Investment Commission (EIC) which has been renamed under Proclamation No. 375/2003 is the principal government organ responsible for promoting, coordinating and facilitating foreign investment in Ethiopia. EIC is accountable to the Board of Investment (BOI). Regional Investment Offices (RIOs) have also been established to promote and handle local investments in their respective regions. There is a strong linkage between EIC and RIOs with respect to technical assistance, the exchange of information and provision of investment facilities. The Ministry of Trade and Industry is also one of the government organ take part in administration of FDI. The EIC serves as a one-stop shop for all foreign investment in Ethiopia.

It provides the necessary information required by investors; receives investment applications; approves and issues investment permits to foreign investors; provides registration services to newly incorporated business organizations; issues trade and operating licenses to approved foreign investments; provides advisory and aftercare services to investors; approves expatriate posts and issues work permits to foreign employees; facilitates the acquisition of land by foreign investors in accordance with the relevant laws of the Federal and Regional Governments; andrenders other pre-and post investment approval services.

The present regulatory regime governing FDI in Ethiopia has also undergone significant changes as a part of the reform process started in 1992/93. The key proclamations of these changes include 7/1996, 37/1996, 35/1998, 36/1998, 116/1998, and 168/1999, 280/2002 and 373/2003. The Ethiopian FDI policy does not require foreign firms to meet specific performance goals. For instance, no performance requirements are imposed in terms of exports, foreign exchange restrictions for imports, minimum local content levels in manufactured goods, or employment limits on expatriate staff.

In light with these proclamations the following principal inducements are offered to FDI:

Foreign investors are fully exempted from customs duties and import tariffs on all capital equipment and up to 15 percent on spare parts; from export taxes. Meanwhile,

income tax holidays are given varying from one to five years (depending on the sector and region within Ethiopia), taxes are deductible from R & D expenditures and remittances of capital are tax exempt. Foreign investors can carry forward initial operating losses and can use any depreciation method in their financial statements.

Investment guarantees for FDI include full repatriation of capital and profits. Under the Investment Proclamation No. 280/2002 Art. 20 (pp. 1774- 1775), any foreign investor has the right, in respect of an approved investment, to make the following remittances out of Ethiopia in convertible currency at the prevailing exchange rate on the date of remittance: profits and dividends accruing from an investment; principal and interest payments on external loans; payments related to technology transfer or management agreements; proceeds from sale or liquidation of an enterprise; proceeds from the sale or transfer of shares or of partial ownership of an enterprise to a domestic investor; and compensation paid to a foreign investor;

Expatriates employed in an enterprise may remit, in convertible foreign currency, salaries and other payments accruing from their employment in accordance with the foreign exchange regulations or directives of the country. Moreover, most of the investment sectors are now open to foreign investors than before. However those currently reserved for domestic private investors and the state are still numerous (see the first item at annex (table 2); areas of investment reserved for government and domestic investors).

Recent Performance of FDI in Ethiopia

Market-oriented policy reforms in Ethiopia over the past decade have placed a major emphasis on attracting foreign direct investment (FDI) as a means of achieving rapid economic growth.

FDI can help the transformation of the present economy to a modern economy in a number of ways. It can supplement domestic savings by facilitating resource transfers to the Ethiopia to raise the level of investment. Equally important, it will be an efficient conduit for the transfer of technical and management know-how, so essential for a modern economy. It can also serve as an instrument to foster market access in industrial country markets. However, Ethiopia receives much less FDI than other Sub-Saharan African countries. Africa accounted for only about 29 percent of world FDI flows in 2007. Of this meager resource coming to Africa, Ethiopia had a share of about 0. 48 percent of Africa (and 0.014 percent of the world). Yet, many sectors can benefit from FDI including textiles and garments, horticulture, tourism, leather products and light industry.

1.3. Statement of the Problem

When a particular country, as common to most of least developing countries(LDCs) in general and Ethiopia in particular, suffer from a resource or saving gap, it will also confront a foreign exchange gap that will have to be filled with an inflow of foreign capital. The possible sources of foreign capital include the foreign loans, official development assistance and foreign direct investment.

Though the net official development assistance per capita showed slight increment from US $20.7 in 1991 to US $25.02 in 2005, the official loan (as share of GDP) to Ethiopia shrunk from 176 percent to 23 percent from 1991 to 2006. Hence, the FDI, as one source of foreign fresh capital, assumed to be more urgent than ever before.

FDI is preferable to foreign loans from the stand point of balance of payments adjustment, since equity investment requires payments only when it earns a profit, but debt requires payments with no consideration to that state of economy. Moreover, the host country prefers FDI in that both commercial risks and the exchange rate risk are totally assumed by the investor unlike the borrowings of which the overall responsibilities are rest on the borrower (host country). FDI also has the added dimensions that it may serve to transfer technology to the host country, to offer

avenues for employment creation in the country, to transfer management skills and increase export competitiveness.

In view of this important role of FDI, it is essential to understand the most important determinants of FDI in the country, Ethiopia. One way to identify effective measures for this purpose is, therefore, to investigate the factors that determine the inflows of FDI in to the country.

A large number of countries around the world spend enormous resources and time in designing and implementing policies that would attract FDI to their respective territories. Various factors including social and political stability of the country, macro economic factors (such as size and growth of market and the cost of production); trade regime in a country and privatization programs may determine the inflows of FDI.

Likewise, Ethiopia, in an attempt to accelerate growth and development, encouraged FDI through the introductions of different incentive packages and liberalization of investment policies. With this back ground, this study which makes use of time series data from 1991 to 2007 is attempted to throw light on the major determinants of FDI inflows in Ethiopia.

1.4. Objective of the Study

The main goal of this paper is to identify and examine factors that determine the inflows of FDI in Ethiopia for the period 1991 – 2007. Side by side with this, an attempt is made to describe the characteristics FDI inflows in Ethiopia during the period under study.

1.5. Methodology

This section presents a general description of the data and the empirical methodology used in this study.

1.5.1. Variable Definitions

a) Foreign Direct investment (FDI)

FDI refers to investment made to acquire a lasting management interest (usually at least 10% of voting stock) and acquiring at least 10% of equity share in an enterprise operating in a country other than the home country of the investor. FDI can take the form of either “green field” investment (also called “mortal and brick” investment) or merger and acquisition (M & A), depending on whether the investment involves mainly newly created assets or just a transfer from local to foreign firms. A proxy FDI as percentage of GDP will be employed to represent the dependent variable. The data comes from UNCTAD, WIR various issues and IMF WDIs data base.

b) Market size and growth

Multinational corporations desire larger host country markets to facilitate greater sale of production. In this study, like others mentioned previously, gross domestic product (GDP) per capita (GDPPC) is employed as a proxy for market attractiveness while GDP growth rate (GDPGR) is used as a proxy for potential market of the host

country. We should observe a positive relationship between the dependent variable and both GDPPC and GDPGR. The data comes from selected statistics on African countries, 2007 African Development Bank and personal computation.

c) Macroeconomic stability

As macroeconomic stability greatly influences annual investment decisions, annual rate of inflation based on consumer price inflation (CPI) is used as a proxy for macroeconomic health. Other things being constant, MNCs should find countries with higher inflation less attractive, thus invest less within the host country. Consequently, the results should indicate inverse relationship between the dependent and independent variable (INFLN). The data comes from selected statistics on African countries, 2007 African Development Bank.

d) Infrastructure

Quality infrastructure such as phones, roads and electricity provide MNCs, with a cost-efficient environment in which to operate foreign offices and production centers. In this study, telephone lines per 1000 persons (TELE) and electricity consumed per GDP (ELEC) should be used proxy for overall infrastructure. The data for telephone lines included only lines connecting to an exchange server, which excludes mobile phones. We should observe positive relationship between the FDI inflows and the proxies. The data come from IMF, WDIs data base.

e) Openness to trade

MNCs often seek to export products to other markets for further manufacturing/assembly or sale. Consequently, a host country's openness to trade will facilitate this export-oriented FDI. With greater openness to trade, host countries should receive greater degree of FDI. Ratio of trade (export plus imports) to GDP (OPEN) as in many papers, including Kandiero and Chitiga (2003), is used as a measure of openness. This analysis should indicate a positive relationship between openness and FDI inflows. The data is collected from Selected Statistics on African Countries, 2007 African Development Bank and IMF WDI data base.

f) Education level

Education level is said to improve labor quality and thus attract FDI. Some scholars use level of provincial illiteracy as a proxy since a low level illiteracy indicates higher level of education. Other use the number of universities (Sun et al,. 2002), number of primary, secondary, and higher level education schools (Na and Light foot, 2006) or percentage of population with primary, junior high and senior high education (Cheng and Kwan, 1999). In this paper the proxy for education level will be the secondary school enrollment ratio (SSER). This is similar to Banga (n.d.). The reason for choosing secondary school enrollment ratio as measurement for education level is due

to the increasing level of advanced technology FDI (OECD 2001) that is likely to require a higher level of education.

g) Financial health

This is measured using the ratio of external debt to exports as proxy. A negative relationship shall be expected between this variable and the FDI inflows, hence huge external debt as compared to its export in one country is the signal for financial crises resulted in shortage of exchange rate weakness.

1.5.2. Data Type and Sources

In this study the secondary data for the period of 1991-2007 are fully utilized. The major sources of data are the International Monetary Fund (IMF) World Development Indicators (WDI) data base and the Selected Statistics on African Countries, 2007 African Development Bank (AfDB). Moreover, data from annual year book statistical abstract from Ethiopian Investment Commission (EIC) and Ethiopian Central Statistical Agency (CSA) and the Annual Report on Ethiopian Economy by National Bank of Ethiopia are used in describing the characteristics of FDI in Ethiopia.

1.5.3. Data Analysis and Presentation

The collected data are analyzed to identify factors that determine FDI using the multiple regressions with the aid of SPSS ver. 15.0 and the result will be summarized

in tables. More over a descriptive analysis concerning the FDI inflows, geographical distributions, type of ownership and industry sectors are also discussed using tables and charts.

1.6. Scope of the study

This study covers only investors involving in the foreign direct investment in Ethiopia and concerns merely with the country levels determining factors. Thus it does not deal with other type of investment and investors and determining factors at regional level are beyond the aim of this study.

1.7. Limitation of the study

The major limiting factor of this study is unavailability of certain variables (independent) to be used as in some of the studies in this nature. These variables may include real wages, real effective exchange rate, and corruption index. More over the limited time given forced the researcher to use only secondary data though it should be better if direct questioning of the investors to obtain insights regarding the investment is of some value. Moreover, the absolute data are used directly to see the significance of the aforementioned variables as determinants of FDI though such type of time series data may have seasonality problems in the model results.

The remaining part of the paper is organized as follows. In chapter two I review theoretical and empirical framework on determinants of FDI in developing countries. Chapter 3 presents the estimation methods and data sets, source and validation and the empirical data analysis. The last part, chapter four, summarize the findings, make conclusions and forward recommendations to the concerned parties.

CHAPTER TWO

Literature Review

The importance of FDI, noted in introductory section, in terms of capital formation, transfer of technical and management know-how, fostering market access in industrial country markets and source of management skills has led to the development of theoretical and empirical literatures which have focused on identifying the possible determinants of FDI. This section deals with the survey of the theoretical and empirical literature on FDI.

2.1. Theories of Foreign Direct Investment (FDI)

Foreign direct investment (FDI) theory is fragmented and consists of a wide range of different economic theories. There is no complete theory that explains FDIs instead is consists of bits and pieces from various authors. In the following paragraphs some of these theories are described.

2.1.1. The Traditional Classical Macroeconomic Theory

This theory hypothesis that the rate of profit has a tendency to drop in industrialized countries, often due to domestic competition, which creates the propensity for firms to engage in FDI in developing countries (Straker, 2006, p. 2). Indeed, classical macro level theory was based on the concept of a perfectly competitive market, where the

increase in demand and subsequent super-normal profits gained in an industry in one country would cause profits to eventually drop with the flooding of the market with new entrants. If a foreign firm entered the market, the extra costs of being foreign would drive them out of business when prices decreased, meaning that they would have to have something which offset the disadvantages of being foreign (ibid, pp. 3-4).

2.1.2. Neoclassical Capital Arbitrage Theory

This theory states that, due to the shortage of and relatively high expense labor in developed nations, they tend to transfer production facilities to poorer, labor intensive countries. Alike the traditional classical macro economic theory, it also states that capital flows from capital intensive countries to capital poor countries, as firms strive to increase overall profits; which may be possible through mere exportation of products. Cantwell (2000, p. 13) has identified a number of flaws of this theory. First of all, this theory suggested that flow of capital was one directional, from developed to underdeveloped countries, whereas in reality, FDI was two-way between developed countries. Second, a country was supposed to either engage in outward FDI or receive inward FDI only. Third, the level of outward FDI was found to vary between industries, meaning that if capital availability was the driver of FDI, then there should be no variation, as all industries would be equally able and motivated to invest abroad. Lastly, as foreign subsidiaries were financed locally, it did not fit that capital moved

from one country to another. The drawback of this theory is that it cannot proof why multinational companies (MNCs) go abroad while it is possible to fulfill this by engaging merely in foreign trade (import and export). From these we can suggest that the neo-classical capital arbitrage theory was insufficient in explaining the movements and cause of MNCs; there seemed to be another element driving firms overseas.

2.1.3. The Market Imperfection Hypothesis

In this hypothesis Hymer postulates that FDI is the direct result of an imperfect global market. Hymer argued that MNEs can only exist in an imperfect market, where firms have non-financial ownership advantages in comparison with other firms in the same industry; meaning that the driver for the MNE lies with the individual firms, rather than the country's capital availability. In order to make FDI and be able to compete on a foreign market the MNC must have a firm specific advantage such as knowledge, differentiated products and the like which, according to Hymer, creates market power on foreign markets. Firms, in theory then invest abroad in order to dominate more markets, raise profits and create more conflict-removing oligopolies. Hymer also states that only the largest of firms, such as those in an oligopoly, could sufficiently offset the costs of being foreign with their strong ownership advantages.

Hymer's theory also criticized by different authors (for example Yamin (2000) & Cantwell (2000). They extend this argument, stating that Hymer discusses the theory

behind why and how firms invest abroad, but that he does not focus on how a firm operates efficiently in other countries, including its use of advantages.

2.1.4. Dunning's Eclectic Paradigm

Unlike Hymer's (1976) normative theory of the MNE, the eclectic paradigm evaluate the state of existing MNEs, or in dunning's words, the paradigm explains "'what is', rather than 'what should be'' (Dunning, 1993 cited in Straker, 2006, p.4). The eclectic framework advantages, revolves around exploiting assets, categorized as ownership, location and internalization advantages, which encompass elements of both macroeconomic theory of FDI and the microeconomic theory of the MNE. It is widely agreed that FDI takes place when these three sets of determining factors exist simultaneously:

i. Ownership specific advantage (of property rights and intangible assets). These arise from the firm's size and access to markets and resources, the firm's ability to co-ordinate complementary activities, such as manufacturing and distribution, and the ability to exploit differences between countries.
ii. Internalization incentive advantages, which arise from exploiting imperfections in external markets. These include the reduction of uncertainty and transactions costs in order to generate knowledge more efficiently; and the reduction of state-generated imperfections such as tariffs, foreign exchange controls and subsidies.

iii. Location specific advantages, which include differences in country natural endowments, transport costs, macroeconomic stability, cultural factors and government regulations. These help determine which countries are host to MNEs' foreign production.

While the first two conditions are firm-specific determinants of FDI, the third one location specific, has a crucial influences on the host country's inflows of FDI.

If only the first condition is met, firms will rely on international trade, licensing or franchising, to service a foreign market. In the presence of internalization incentives FDI becomes the preferred mode of servicing foreign markets, but only in the presence of if location-specific advantages. If the three conditions for FDI to occur, locational determinants are the only ones that host governments can influence directly (United Nations Conference on Trade and Development (UNCTAD), 1998 pp 89 - 90).

As per this report (UNCTAD, 1998), the location specific (host country) determinants of FDI flows and stocks can be categorized in to three broad classes: (i). national policy framework for FDI, (ii). Business facilitation and (iii) economic motives.

i. National Policy Framework for FDI

This includes economic, political and social stability, rules regulating entry and operation of FDI, standard of treatment of foreign affiliates, policies on functioning

and structure of the markets, international agreement on FDI, privatization policy, trade policy and tax policy (UNCTAD, 1998, pp. 91 - 99).

ii. Business Facilitation

This refers to the ease with which business can be conducted in the host country. The most important business facilitations measures include investment promotions efforts and the provisions of incentives, hassle costs of doing business in a host country related to corruption and administrative efficiency, development of financial institutions, enforceability of contracts and protection of property rights and the provision of amenities that contribute to the quality of life of expatriate personnel (UNCTAD, 1998, pp. 99 - 106).

iii. Economic Motives

The most important determinants for the location of FDI are economic considerations. They come in to full play once an enabling FDI policy is in place. Following from the motivations for investing in foreign countries, the principal economic determinants can be grouped into three clusters: resource seeking, market seeking and efficiency seeking.

Resource/Asset -Seeking

Availability of natural resources, cheap (unskilled or semi-skilled) labor, creative assets and physical infrastructure (ports, roads, power, and telecommunication) are among resources FDI are seeking to have in the host countries. Here it is noted that comparative advantage in natural resources usually gave rise to trade rather than to FDI. Investment took place when resource abundant countries either have no large amount of capital typically required for resource-extraction, or did not have the technical skills needed to extract or sell raw materials to the rest of the world (Dunning, 1993 cited in UNCTAD, 1998, p. 109). In addition, infrastructure facilities for exporting the raw materials to their final destination had to be in place or needed to be created.

Labor seeking investment is usually undertaken by manufacturing and service multinational enterprises from countries with real labor costs to supply labor-intensive intermediate or final products. Frequently, to attract such production, host countries have set up free trade or export processing zones.

Market-Seeking

Another highly important determinant of FDI are known as market factors, which are market size, in absolute terms as well as in relation to the size and income of its population, and market growth. For firms, new markets provide a chance to stay competitive and grow within the industry as well as achieve scale and scope economies.

Efficiency-Seeking.

The motivation of efficiency seeking FDI is to rationalize the structure of established resource based, or market-seeking, investment in such a way that the investing company can gain from the common governance of geographically dispersed activities. The intention of the efficiency seeking firms is to take advantage of different factor endowments, cultures, institutional arrangements, economic systems and policies, and market structure by concentrating production in a limited number of locations to supply multiple markets. Moreover, in order for efficiency seeking foreign production to take place, the macroeconomic and political situation has to be stable; cross-border markets must be both well developed and open (Dunning, 1993; Rugman, 1998).

2.2. Empirical Studies

Although, in theory, it is possible to understand why multinational enterprises engage in FDI, the empirical question of why foreign firms locate subsidiaries in developing countries is not easily answered. Some of the empirical studies are assessed below.

The factors that determine foreign direct investment include growth of GDP as proxy of potential market (Addison and Hesmati, 2003; Hisarciklilar, et al, 2006), population and/or GDPPC as measure of market size (Hisarciklilar, et al, 2006), degree of openness (Onyeiwu, 2003) political stability (Mellahi 2003) infrastructure

(Onyeiwu, 2003; Mellahi, 2003; Hisarciklilar et al, 2006).Other determinants include education, research and development, country risk and domestic investment (Moosa, 2006), and risk instability (Chan and Gemayel, 2004). It is interesting to note that there are a number of factors that determine inflows of FDI in a particular country. This factors are described in the following pages from each authors perspective.

The size of the market has been widely found to be significant incentives for FDI inflows and in some cases it has proven to be the most important determining factor.

UNCTAD (2002) have shown that market size and access to natural resources have been crucial determinants of FDI in Sub-Saharan Africa (SSA). This is not surprising, given that the SSA countries that have been able to attract any meaningful FDI have been those with large domestic markets and those that possess large amounts of natural and mineral resources.

The relationship between market size, measured by GDP, and FDI inflows shows that in 1996-97, South Africa, followed by Nigeria and Cote d'Ivoire have the largest GDP and hence the largest inflows of FDI. At the other extreme, Niger and Burundi, with the lowest GDP, attract the lowest FDI flows. Further, for a sample of 29 SSA countries, the correlation coefficient between FDI flows and market size is almost perfect at 0.99.

In the case of natural resources, FDI inflows into SSA countries by sector show that 54% of FDI went to the primary sector (natural resources) in the period 1996-2001. In 1996-97, correlation coefficient of the value of natural resources and FDI inflows stood at 0.94 for a sample of 29 SSA countries (UNCTAD, 2002, pp. 29-31).

Apart from natural resources and market size, Morisset (2001), using FDI climate as the dependent variable, showed empirically that GDP growth rate and trade openness are significant and positively related to the investment climate in SSA. Trade openness, being significant, confirms and supports the policy of trade liberalization, now being pursued by the majority of SSA countries. The empirical analysis reveals four differences. First, geographical location is an explanatory factor in low levels of FDI to Sub Saharan Africa. Second, higher returns on capital attract FDI flows to other developing countries but do not have a significant impact on FDI to Africa. Asiedu (2002) reasons that this is because the investment environment is more risky in Africa. Third, openness to trade has less impact on FDI in Africa than in other developing countries, and African countries have received lower levels of FDI in part because they are less open to trade. Asiedu (2002) also suggests that trade liberalization may be less effective in Africa; possibly because investors do not believe trade reform is credible. Finally, infrastructure development does not have a significant impact on FDI to Africa but encourages FDI to other developing countries. One explanation for this is the importance of natural resource investment in Africa; this type of investment is less dependent on existing infrastructure (Asiedu, 2002).

In his analysis of cross country regressions on determinants of FDI, Chakabarti (2001) has identified the size of an economy as a considerable determinant of FDI inflow for developed and developing economies alike. More extensively, through analysis made on trends in private investment in developing countries, Pfefferman and Manderassy (1992), identified three major reasons why market size is treated as one of the most important considerations in making investment location decisions. Accordingly, it is larger potential for local sales, the greater profitability of local sales than export sales and the relatively diverse resources which make local sourcing more feasible. The market size hypothesis predicts that markets with large populations and/or rapid economic growth (as measured by real GDP per capital or its growth) tend to give multinational firms more opportunities to generate greater sales and profits and thus become more attractive to their investments.

This was not the case before two decades when the FDIs are export oriented; for example, according to the survey study made on determinants of foreign direct investment, by Agarwal (1980), the size of the market, however, might be less influential, or even insignificant, when FDI is invested to exploit the host country solely as a production base; that is, to reap profits from the cost advantage of the host economy by exporting the production, more competitively, to markets at home or in third countries.

Recent study of Zhang (2007, p. 24) concluded that further studies needs to be carried out to support the fact that, whether high gross domestic product (GDP), used as a proxy for potential market, is a prerequisite for investments or an after following result of FDI. He showed that in areas with decreasing and unchanged GDP and gross domestic per capita (GDPPC), inflows of FDI has been increasing steadily. Thus, according to this study we can infer that of, it is doubtful that theories arguing GDP growth and GDP per capita has a major effect on FDI.

Obwana, et al (n.d. p. 24), in their study about FDI flows to SSA countries a Case of Uganda, concluded that the traditional economic determinants related to large markets, trade barriers and non-tradable services are still at work and account for a large share of world wide FDI flows. In addition, according to Obwana, et al, the general trend towards the reduction of trade barriers through the reduction or even abolition of tariff and quotas remain a significant factor for developing countries in attracting FDI and continue to generate most of the FDI in import substitution ventures. Moreover, in terms of non-tradable services and perishable goods or goods intended to be adapted to consumer preferences or local standards, the market seeking motivation and the corresponding locational attractiveness of the host country remain strong factors.

Bennett (2005, pp. 20 - 21) employ OLS regressions using a balanced panel data from a 22 country sample over the period 1982 – 2000, seeks to identify the determinants of FDI in sub-Saharan Africa. He has indicated the significance of political rights repression which negatively impacts investors' likelihood of investing. The significances and positive sign associated with the trade variable, proxy of openness, implies that policy shifts toward liberalization will promote investment. Lastly, he showed the consistent significance of market size and its growth in determining the FDI inflows (Bennett, 2005, pp. 20, 21).

Noorbakhsh, et al (2001) made empirical study on human capital and FDI inflows to developing countries. They found significance in a panel analysis using Whites' correlation methodology with fixed effect region specific dummies. They used three difference measurements for human capital; secondary school enrollment, accumulated years of secondary schooling and combined tertiary and secondary education in working population. Noorbakhsh et al, concluded that human capital over time have become a greater importance using separate regression for three distinct time periods over the time 1985 – 1994.

Kinoshita and Campos (2002), has tested factors explaining the geographical distribution of FDI inflow across 25 transition economies by using panel data between 1990 and 1998. Their result suggest that agglomeration economies as the most significant determinants of FDI inflows in the transition economies. They also found

that poor quality of the bureaucracy in the host country is a deterrent to foreign investment decisions even after controlling agglomeration effect. Improving institutional governance such as bureaucratic quality is a strong signal of favorable investment environment for many foreign investors. Economic and political stability is a necessary condition in order for a host country to attract foreign investment.

Using both primary and secondary sources of data Obwona (2001), examined determinant of FDI and their impacts on economic growth in Uganda. He concluded that foreign investors are primarily concerned with fundamental factors, that are, a stable macro economic and political situation, together with credibility of policy reforms. A stable and sustainable macro economic environment boosts the confidence of private investors. Reductions in debt burden are also critical not only for sustaining both external and fiscal balance but also for engendering confidence to encourage private sector investment.

According to Obwona (2001, pp. 68–69) other factors that determine the location decision of investors are market size (measured by GDP per capita or size of the population) and market growth (measured GDP growth rate in constant price) which have significance. In addition factors such as availability of natural resources, the quality of the infrastructure and the cost, productivity and technology skills of labor are also among the determinants of FDI in Uganda. Through his concluding remarks from the view point of attracting investment, the macroeconomic and political

stability and policy consistency are much more important than the level of the incentive themselves.

Banga (n.d.) in his side made an empirical study on 'Impact of Government Policies and Investment Agreements on FDI Inflows to Developing Countries'. He found economic fundamentals, namely, large market size (measured by real GDP); low labor cost (in terms of efficiency wages taking in to account enrolment ratio); lower external debt reflecting the financial health (measured by ratio of external debt to exports) and extent of electricity consumed in the economy (measured by electricity consumed per GDP), as significant determinants of aggregate FDI. The significance of these economic fundamentals, however, differs in terms of the source of FDI, developed countries versus developing ones.

In another study of the effect of policy on FDI in Africa, Morrisset (2000) suggests that it is useful to look at those countries that have been attracting FDI successfully over the past few years when they could not rely on abundant natural resources and the size of the domestic market (the historic motivations). A variable measuring the business climate for FDI is constructed (by normalizing the value of total FDI inflows by GDP and the total value of natural resources in each country). According to this index, of the 29 African countries in the sample, Namibia, Mali and Mozambique were found to be the most attractive locations for FDI in 1997 and 1998.

In attempting to determine what makes the FDI business climate attractive in Africa, a range of variables were used in the regression analysis, including, amongst others, GDP growth, illiteracy rates, the ratio of trade to GDP, telephone mainlines per 1,000 people and the ratio of urban to total population. These variables are similar to those used in the work reviewed above. Morrisset finds that the most important features of countries successfully attracting FDI are strong economic growth and aggressive trade liberalization. Other important factors include privatization programs, the modernization of mining and investment codes, the adoption of international agreements relating to FDI, a few large priority projects which have significant multiplier effects, and a high-profile image-building exhibition involving the head of state.

According to Banga (n.d., pp 34 and 35), FDI from developed countries are attracted to large market size, higher education levels, better financial health, greater transport and communication and lower domestic lending rates, while FDI form developing countries are attracted to large market size, potential markets, lower labor costs, devaluation of exchange rate, higher stock of transport and communication lower lending rates and exchange rate stability.

By controlling the effect of economic fundamentals, Banga also concluded that the impact of selective government policies also differ based on the source countries development level. Lower tariff rates are significant determinants of FDI from

developing countries but do not attract FDI from developing countries. Fiscal incentives, on the other hand, are also found to attract FDI from developing countries but it is removal of restrictions on their operations that attract FDI from developed countries.

Stephen et al, (1997), using the OLS regression model, argued that the gross domestic product (GDP), imports, exports, infrastructure, political risk, are significant influences on the decisions of MNCs to invest abroad. Laura (1999), on her side, explained by applying the regression that a statistically significantly positive association has been found between FDI and market size, wage differential, the stage of the transition process and the degree of openness of economy as well.

Kinoshita (1998), using survey data to study the locational determinant of FDI by Japanese manufacturing firms in seven Asian countries, reported that infrastructure encourages firms to invest in a certain country. Cheng and Kwan (2001) confirmed the findings of Kinoshita using the case of 29 Chinese regions for the period between 1985 and 1995.

Kumar (2001), using a composite index of infrastructure availability for the case of 66 countries, concluded that 'MNEs decision making pertaining to location of product mandates for global or regional markets sourcing is significantly influenced from infrastructure availability considerations and that infrastructure development should become an integral part of the strategy to attract FDI inflows in general'.

In a review of empirical studies which examine the determinants of flows of FDI to developing countries, Asiedu (2002) finds that not only is there a variation in the factors counted to be important but different studies yield conflicting results with respect to the same factor. For instance, Asiedu notes that GDP per capita is found to have a positive relationship with FDI; in Schneider and Fry (1985), Tsai (1994) and Lipsey (1999); a negative relationship with FDI in Edwards (1990) and Jasperson et al (2000); and to be insignificant in Loree and Guisinger (1995), Wei (2000) and Hausmann and Fernandez-Arias (2000). Part of the reason for these different findings is that this variable can capture different effects. It can act as a proxy for returns on capital, based on the assumption that higher returns are available in poorer countries, with the implication that GDP per capita is inversely related to FDI. Alternatively, higher GDP per capita can imply better prospects for FDI in the case of market-seeking investment. Asiedu also finds that labor costs can have a positive impact on FDI (Wheeler and Mody, 1992); a negative impact (Schneider and Fry, 1985) and an insignificant effect (Tsai, 1994; Loree and Guisinger, 1995; Lipsey, 1999).

Seetanah (n.d., pp. 26-27) investigated the role of transport infrastructure in enhancing the attractiveness of FDI recipient country using a sample of SSA countries over the period 1984 - 2002. He found that transportation capital has important ingredient in making the countries attractive to FDI both in short and long run and same is observed for those of non transport infrastructure.

In a study of FDI in Africa, Ngowi (2001) points out that it is difficult to determine the exact quantity and quality of each of the determinants of FDI that should be present in a location for it to attract a given level of FDI inflows. Nevertheless it is possible to identify factors that all firms are believed to consider when deciding whether or not to invest in a particular country. Ngowi then concludes that, with respect to African countries, the main factors preventing an increased inflow of FDI are that most countries are regarded as high risk and are characterized by a lack of political and institutional stability and predictability. Additional factors that are cited as hindrances to prospective FDI include poor access to world markets, price instability, high levels of corruption, small and stagnant markets and inadequate infrastructures.

Jenkins and Thomas (2002) studies FDI in southern Africa in relation to determinants, characteristics and implications for economic growth and poverty alleviation. They have put the size of the local market as the most important motivation for investment. Economic growth to increase the size of the local market may need to be a precursor to high levels of FDI. Where domestic markets remain small, only a limited number of foreign investors are likely to enter. A functioning and sustainable free trade are more likely to offer the economies of scale required for investment to be profitable and thus should encourage more direct investment in the region.

Most of the literature on FDI in Africa as a whole has common perceptions that FDI to Africa is driven by availability of natural resources, mainly solid minerals and crude oil. If this is true, the FDI in the region is largely determined by an uncontrollable factor. In addition, it suggests that countries that do not have natural resources will attract very little or no FDI regardless of the policies they adopt (Asiedu, 2005). Asiedu, using a panel data for 22 countries in sub-Saharan Africa between the period 1984 and 2000, shows that macroeconomic stability, efficient institutions, political stability and a good regulatory framework have a positive impact on FDI.

Few studies using gravity model have placed special emphasis on location determinants of FDI. Chunlai (1997), Nunnenkamp (2002) and Banga (2003) using a modified gravity model found that market size, GDP growth, manufacturing efficiency wage, remoteness, stock of FDI and openness play a key role in attracting FDI.

In their paper, 'Determinants of FDI and Economic Growth in the West African Monetary Zones: A System Equation Approach, Uda and Obiora (2006) concluded that FDI depended on the market size measured by the level of per capita income and the growth of GDP, as well as the level of uncertainty measured by political instability and macroeconomic instability or inflation. There was no evidence of any two way relationship between FDI and growth. However, they have found a high rate

of economic growth to be an important determinant of FDI location decisions. Among other factors, public investment in infrastructural development, macro economic stability and political stability will encourage the flow of FDI in to the region.

Saskia et al (1998, couted in Hakro and Ghumro, n.d., pp. 5-10) have analyzed the determinants of net FDI inflows in emerging economies between 1978 and 1995. The theoretical framework of this study is based on the concept of the institutional FDI Fitness theory, which stipulates that FDI is determined less by intransigent fundamental that by institutional variables more amenable to change, namely policies, laws, and their implementation. This has suggested that four institutions contributing to FDI fitness are government, markets, education and socioculture. Among these in their econometric analysis Sasikia et al showed that government and market variables as the most significant determinants of FDI inflows.

Lipsey (2000 as cited in Udo and Obiora, 2006, p. 13), found that trade openness is the single most important determinant of FDI inflows, and that the ratio of FDI is the most consistent positive influence on subsequent growth rates.

Using 20 years of FDI international data, Stephen et al (1997) concluded that the gross domestic product (GDP), imports, exports, infrastructure, political risk, are significant influences on the decisions of MNCs to invest abroad.

Abdulai (2007, pp. 12-15) analyzed some reasons for low inflows in to SSA. One of the main reasons, according to Dagash (1998 quoted by Abdulai, 2007), for low inflow of FDI in SSA, can be attributed to the negative image often depicted of the continent in the media.

Another reason given for low FDI inflows into SSA is the perception on the part of most MNCs and perceptive of investors that it is a region that has large unskilled labor force. This would have been an advantage when most of the previous exports of MNCs to developed countries were based on the production of labor-intensive manufactured goods. Today, advances in technology and increased competition have brought about an increase in the capital and skill intensity ratio in many industries and the goods produced. Labor costs alone today do not serve as a pull factor for FDI. A high quality, productive, well-educated, skilled and disciplined labor force is what required to help maintain the competitive edge of most MNCs in the global market place. Because such skilled labor force is limited in SSA countries, it, therefore, serves as one of the causes of its low FDI inflows.

As third variable Abdulai (2007, p.13) mentioned poor infrastructure of SSA countries. Physical, financial and institutional infrastructure in general are less developed. Roads, telecommunications, ports and airports are poor or underdeveloped and thus hamper business growth and efficiency. Thus, those countries without such infrastructure are going to lag behind in their ability to attract FDI. Investors today

like to be able to get in touch with their respective head offices and families with ease when they are abroad, check their e-mails and undertake other transactions from their phones or computers. It is difficult to do so from areas with poor telecommunications infrastructure as it is the case in most countries in SSA. The poor nature of SSA's infrastructure and infostructure adds an enormous cost to doing business in the region and thus hinders FDI inflows.

Furthermore, according to Abdulai (2007, p. 14), even though most SSA countries have liberalized their economies and investment policies to make it easy for foreign companies to invest in certain sectors, many countries in the region still restrict entry into other sectors of their economies in response to pressure from domestic interest and pressure groups. Such discriminatory investment policies affect FDI inflows. In addition most of the countries in the region do not have in place the requisite legal structures and reforms to protect foreign investors, especially in the wake of internal upheavals. Many prospective foreign investors thus worry that without such legal securities nationalized or expropriated by the state for arbitrary reasons as it has been the case in some Africa countries in the past. Prospective investors also fear that they may not get proper justice in the settlement of disputes because of the poor judicial systems in the region. The perception is that the weak judicial systems in most countries in SSA would make it hard to enforce contracts once they are broken. Some countries do not have effective courts once they are broken. Some countries do not have effective courts or institutions for arbitration of business conflicts. Thus the issue

of sanctity of laws is of extreme importance and needs to be seriously addressed if SSA countries are to attract FDI.

Moreover, many SSA countries still have overvalued currencies and others still impose restrictions on foreign exchange transactions. The advent of adjustment policies in the region has forced many countries to liberalize their foreign exchange systems. However, many of these foreign exchange liberalizations have been accomplished by decree without a follow up on the part of many governments in the region with the requisite legislative instruments to support their enforcement. This creates an uncertain atmosphere for prospective investors as they grapple with the possibility of being able to repatriate their profits and this can affect FDI inflows into the region.

Finally, the small size of domestic markets in the region has been held out as another reason for the low FDI determinant by Abdulai (2007, pp 15). Unfortunately, most domestic markets in SSA are fragmented and small and cannot effectively demand goods produced by the MNCs. In addition, if domestic markets in SSA were large, MNCs could experience economies of scale because they could increase production with the cost per unit of output being low. Thus, because most domestic markets are small in SSA, it affects FDI inflows.

In the study made on FDI in South African Development Countries (SADC), Mwilima (2003) summarized factors influencing investors' decisions. She argued that

a strong policy and regulatory regime, appropriate institutions, good infrastructure and political and economic stability are important to attract FDI.

According to Odentahal from UNCTAD (2001) as cited in Mwilima (2003, p. 10), business has indicated different determinants for decisions to invest abroad. He enumerated the factors as: policy framework for FDI such as political and social stability, rules about treating operations of affiliates of foreign companies and international FDI agreements, economic determinants such as the size of he market and per capita income, cheaper costs for infrastructure or intermediate products; business affiliation provisions such as investment incentives which are mostly considered to be important determinants but they are not, except in case of choice between two equally attractive locations. Privatization programmes have also become a source for attracting FDI.

The Consumer Unity and Trust Society (CUTS) has identified several reasons that hindered FDI in to African countries. These include market size, lack of policies, lack of profit opportunities, inconsistent set-up, negative perceptions, shortage for skills, labor regulations, poor infrastructure and corruption (CUTS, 2002).

Emphasizing the size of the domestic market a study by Hesmati & Addison (2003), shows that FDI seeking a base to produce for the domestic market in the host country is attracted to a country in which real income and therefore domestic purchasing power is growing. However, when analyzing locational drivers, Hisarciklilar, et al

(2006) concluded that the market does not comprise of the host economy but also regional trade and trade with the rest of the world.

In a study on Oman, Mellahi, et al., (2003) show that the market size is among the least desirable factors for foreign investors. Countries may also decide to invest in countries in order to enjoy the low wage advantage.

In contrast, a study made by Jaumotte (2004), on the FDI and Regional Trade Agreements, found a positive impact between FDI and Regional Trade Agreements. The creation of a Regional Trade Agreement (RTA), by enlarging the market size of individual countries, tends to stimulate the inflows of FDI. This is an important benefit which, by its dynamic nature may well outweigh the static costs of trade diversion. The study showed that the market size, size of population as well as the quality of population resulted in some countries in the RTA benefiting more than others. On the other hand Jaumotte (2004) has concluded that, countries that were financially stable tend to attract a larger share of FDI.

The previous characteristics of FDI in China can all be grouped as location advantages in its broadest sense, signified by factors such as unbalanced source country, uneven regional distribution of FDI and distribution of realized of FDI caused by the determinants of market size, low labor costs, government policies, Chinese connections, geographical distance etc. As Zhang described, export-oriented FDI is motivated by foreign cheap labor, while market-oriented FDI is motivated by

foreign market access, i.e. locating manufacturing in multiple countries to serve local markets (Zhang, 2000). The export-oriented FDI is more likely to be attracted to host countries with low wages relative to source countries (Zhang and Markusen, 1999). Hence, this type of FDI is usually attracted to countries that offer favorable incentives conditions.

Kathryn et al (1995), concluded that there has been no statistically significant relationship between the level of the exchange rate and foreign investment relative to domestic investment after controlling for relative corporate wealth and the over all level of investment.

Soboleva (1999), in her thesis by developing a dynamic structural model of a firm's location choice for its production affiliates analyzed the effect of trade policy on FDI. She has considered both tariff and non-tariff barriers to exports and explicitly model the link between investment decisions and trade policy. The results provide evidence on micro level determinants of investment decisions.

Narula (1998) described that the competitiveness of MNEs becoming increasingly mobile and knowledge intensive and also explained that MNEs give more attention to the availability and quality of created assets of alternative locations. Narula (1998, pp. 12 and 13) argued that economic structure's plays less important role in determining the FDI activities of industrialized countries than developing ones, there seems to be no indication

that they are becoming insignificant He also described that inward investment directed towards the exploitation of natural assets and markets (in case of developing countries).

Nebende et al (2000) stated that the cost related factors are the dominant determinants of FDI. In particular, the dominance of real wage rates and human capital suggest that the "under priced" skilled (semiskilled) labor is the deriving force behind FDI. Nabende et al their study investigated both the short-run and long-run locational determinants of FDI under the broad categories of cost-related, investment environment improving and other macroeconomic factors. The short-run dynamics indicated that European investment in the Thai manufacturing sector has been more responsive to the macroeconomic factors. The long-run dynamics on the other hand suggested that European investment has been more responsive to the investment environment improving factors. Steven (1995) evaluates the relationship between patterns of international technological specialization and the competition provided by FDI, he suggests that TNCs have a relatively weak over all impact on patterns of technological specialization with in and between the countries.

Root and Ahmed (1979) also found that the number of regular (constitutional) changes in government leadership between 1956 and 1967 was significant. However, other political variables, such as the number of internal armed attacks, the degree of nationalism and colonialism and colonial affiliations, were not significant.

Schneider and Frey (1985) found a negative relationship between the number of political strikes and riots in the host countries and FDI flows. In the early nintith century, Wheeler and Moody (1992), has found a broad principal component measure of administrative

efficiency and political risk as the determinants of FDI. Government fitness also means a strong rule of law and low corruption, based on legal and administrative equity and transparency.

Aggarwal (1997) explains that economic reforms in a host country not only confer greater freedom on TNCs in their choice to internalize or not, but also affect the market conditions, which in turn, influence this choice.

Kadi (1999), synthesizes that causes of low percentage of FDI in Middle East due to many factors including chronic political instability, empirical evidence drawn from model that test cross section data of 59 countries to provide evidence of positive relationship between both trends, FDI and economic freedom.

Stephen et al, (1997), using twenty years of FDI international data concluded that the gross domestic product (GDP), imports, exports, infrastructure, political risk, are significant influences on the decisions of MNCs to invest abroad.

Laura (1999) explained by applying the regression that a statistically significantly positive association has been found between FDI and market size, wage differential, the stage of the transition process and the degree of openness of economy as well. However, a statistically significant negative relation has been found for proximity to Europe and the degree of industrial concentration.

There is a positive relationship between FDI flows and domestic market size and its growth. This is supported by inter-country empirical studies, Kumar (1996). Market size and its growth are especially important for FDI targeted at supplying the local market. Access to regional markets is thus also very important.

Macroeconomic and political stability, low business environment risk, well-trained labor force, competitive labor cost, good industrial relations, effective and efficient legal institutions, and quality infrastructure services are key determinants of an enabling business environment, according to empirical evidence. Convertible currencies, liberal exchange rates, low inflation rates, small current account deficits, extent of industrialization and urbanization, high credit rating, freedom from bureaucratic intervention, and similar arrangements promote FDI (Hopes and Ikiara, 2003, pp. 23-28).

Access to capital and level of external indebtedness, good governance, transparency, institutional soundness, and security are also important ingredients of a conducive business environment. FDI manufacturing in Asia has tended to locate in areas with developed ports, roads, power, and telecommunications, Wells Jr. (1993). Education and literacy levels are also important especially in Africa.

Studying the Determinants of FDI in China, Ali and Guo (2005), has argued the determinants of FDI inflows into China identified by FDI theories can be classified into three categories, Micro-, Macro, and strategic determinants. Micro factors

concern firm ownership specific advantages such as product differentiation and the size of the firm. Macro-determinants of FDI emphasize the market size and the growth of the host country, which is measured by the gross domestic product (GDP), GDP per capita, GNP, or GNP per capita, as rapid economic growth may create large domestic markets and businesses. Other macro factors include taxes, political risk, exchange rates, and so on. Strategic determinants refer to those long-term factors such as to defend existing foreign markets, to diversify firms' activities, to gain or maintain a foothold in the host country, and to complement another type of investment.

China's GDP has grown between 8-9% per year since 1980. Studies have shown that market size, measured by GDP, GDP per capita, GNP, or GNP per capita, has a significant effect on inward FDI. Rapid economic growth creates large domestic markets and business opportunities for foreign firms to invest in China. Swain and

Zhang (1997) analyzing data of FDI in China in the period of 1978-92, used GDP and real GDP growth rate; Liu et al (1997) using GDP, GDP growth, wages, concluded that market size is the fourth most important economic factors for the pledged FDI in China. Their empirical results indicated that the real GDP rate was significantly related to inward FDI in China. The positive relationship between market size and inward FDI is also confirmed by Zhang (2000) and Wei and Liu (2001) who found that both US and Hong Kong FDI are attracted by China's large market size. This reflects the market-seeking motive of US firms and Hong Kong firms to shift from

mainly export-oriented investments towards the Chinese markets. Hence, most empirical results are consistent with each other that market size is the most important factor why foreign firms invest in China. The larger the market size of province, the more FDI is likely to be received (Zhang, 2002).

On the other hand cost factors are one of the determinants of FDI, among which labor cost has been extensively investigated in the study of FDI. Although it is logical to say that foreign firms can take advantage of low labor cost by investing in developing countries, there is another argument that the cost of transportation and low productivity often exceeds the cost of labor in developing countries (Miller, 1993). Swain and Wang (1995) found that there was a positive relationship between the relatively cheap labor in China and inward FDI.

Liu et al (1997) also agreed that the low wage rates were one of the most important economic factors for FDI. Both Zhang and Yuk (2000) found that China's relative cheap labor costs greatly encourage HK Multinationals to invest in Mainland China. On the other hand, Zhang (2000) concluded that the labor cost factor hardly had any influence on US MNE decisions to invest in China. Even recently, low labor cost is still proving to be key location factor for foreign investors in China (Wei and Liu, 2001), especially in manufacturing industries such as automobile assembly and telecommunication equipment. Lieberthal and Liberthal (2003) found that electronic apparatus and telecommunication manufacturers in Hong Kong and Taiwan have

proven particularly adept at leveraging inexpensive mainland Chinese workers for international competitive advantage. However, the low-labor-cost advantage of China may not be sustainable as China now faces competition from its neighboring countries such as Vietnam, Laos, and India, which are also endowed with cheap labor factors and have adopted various policies to attract FDI.

Although it has been argued that political instability in the host country could discourage the inflow of FDI, and most of the empirical studies support this argument, some empirical evidence suggested that political factors played an insignificant role in firms' decision to invest abroad (Swain and Wang, 1997, and Zhang, 2002).

In summary, we noted that the theory of determinants of FDI flows has developed substantially overtime. Beginning with the neoclassical approach, followed by other theories includes the relative competitive advantage approach, Hymer (1976), and the 'electic paradigm' Dunning (1993). These theories and other empirical studies show that the major determinants of FDI flows include domestic market size and its growth (forecample, in market is positively and significantly affect the FDI inflows in, Kumar,1996, CUTS, (2002), Hesmati and Addison (2003), Jamoutte (2004), Ali and Guo (2005), Udo and Obora, (2006) and Abdulai (2007). In contrary, the findings of Loree and Guisinger (1999), Wei (2000), Hausmannn and Ferndandez (2000), and Mellahi, et al., (2003) show the insignificant and positive relationship between FDI and market size. Moreover, the negative relationship also found by Edwards (1996)

and, Jasperson, et al., (2000). On the other angle, the significance of the market size may also find to be dependent on the source country's level of development; thus according to Tsai (1994), Lipsey, (1999) and Asiedu (2002) FDI from developed nations are more determined by the availability of large market size, while those form developing nations are more emphasized on the availability of cheaper factors of production and incentives.

Labor quality and its costs also one of the determinant factor of FDI inflows. This was found to be significant various empirical studies (for example, Assiedu, (2002) and, Uda and Obiora (2006)). Still Abdulai (2007) found insignificant relationship between FDI and labor, using a proxy secondary school enrolment ratio.

The other most important variable is the infrastructure development of the host country which are found to be the most significant and positive determinant factor (see for example, Stephen et al., (1997), Hopes and Ikiara, (2003), Mwilima (2003), Uda and Obiora 92006) and Abdulai, (2007).

Other variables may include, inflation in (Mwilima, 2003); financial health which is measured using ratio of external debt to export as a proxy and determined to be negative and significant (Wells, 1993 and, Uda and Obiora, 2006) and political and social stability which are significantly affect the FDI inflows (in Kadi, 1999; Mwilima, 2003; Jaumottee, 2004; Ali and Guo, 2005). Moreover, the domestic business environment, technological capability, trade policy, investment policy,

commitment to international rules and agreements are among the major factors reviewed here.

CHAPTER THREE

Empirical Data Analysis

3.1. Types and Source of Data

As described under section 1.5, the type of data used in this study are secondary in type. The data are accessed from external sources such as; International Monetary Fund (IMF) World Development Indicators (WDI) data base and the Selected Statistics on African Countries, 2007 African Development Bank (AfDB) and the internal sources from annual year book statistical abstract from Ethiopian Investment Commission (EIC) and Ethiopian Central Statistical Agency (CSA) and the Annual Report on Ethiopian Economy by National Bank of Ethiopia. These data are not directly used to regress their effect on the flows of FDI the country. As common to most of the time series data they are tested for multicolinearity, linearity and variance inflation as described in the following section.

3.2. *Methods of Data Analysis*

In this study a multiple regression is used to analyze the determinant factors of FDI in Ethiopia for the last seventeen years since 1991. The researcher chosen this model because it gives variety of alternatives in analyzing the effect of variables as described under. Multiple regression, a time-honored technique going back to Pearson's 1908

use of it, is employed to account for (predict) the variance in an interval dependent, based on linear combinations of interval, dichotomous, or dummy independent variables. Multiple regression can establish that a set of independent variables explains a proportion of the variance in a dependent variable at a significant level (through a significance test of R^2), and can establish the relative predictive importance of the independent variables (by comparing beta weights). One can test the significance of difference of two R^2's to determine if adding an independent variable to the model helps significantly. Using hierarchical regression, one can see how most variance in the dependent can be explained by one or a set of new independent variables, over and above that explained by an earlier set. Of course, the estimates (b coefficients and constant) can be used to construct a prediction equation and generate predicted scores on a variable for further analysis.

The standardized version of the b coefficients are the beta weights, and the ratio of the beta coefficients is the ratio of the relative predictive power of the independent variables. Associated with multiple regression is R^2, multiple correlation, which is the percent of variance in the dependent variable explained collectively by all of the independent variables.

Multiple regression shares all the assumptions of correlation: linearity of relationships, the same level of relationship throughout the range of the independent variable, interval or near-interval data, absence of outliers, and data whose range is

not truncated. In addition, it is important that the model being tested is correctly specified. The exclusion of important causal variables or the inclusion of extraneous variables can change markedly the beta weights and hence the interpretation of the importance of the independent variables.

To be validly benefited from this model, the following major assumption has been tested for this particular study and the necessary remedial actions have been taken as described in the following paragraphs.

Tolerance is 1 - R2 for the regression of that independent variable on all the other independents, ignoring the dependent. There will be as many tolerance coefficients as there are independents. The higher the intercorrelation of the independents, the more the tolerance will approach zero. As a rule of thumb, if tolerance is less than .20, a problem with multicollinearity is indicated (Berry, 1993). When tolerance is close to 0 there is high multicollinearity of that variable with other independents and the b and beta coefficients will be unstable. The more the multicollinearity, the lower the tolerance, the more the standard error of the regression coefficients. (Berry, 1993, pp. 98- 123).

On the other hand VIF, the variance inflation factor, is the other indicator of multicolinearity, which is simply the reciprocal of tolerance. Therefore, when VIF is high there is high multicollinearity and instability of the b and beta coefficients. VIF and tolerance are found in the SPSS output section on collinearity statistics.

The correlations of the independent variables with the dependent appear in the Model Summary table in SPSS output. The correlations among the independents, useful for checking possible multicollinearity, appear in the Coefficients Correlations table. A rule of thumb is that multicollinearity may be a problem if a correlation is > .90 or several are >.70 in the correlation matrix formed by all the independents (Fox, 1991, pp. 14-15).

Table 7 at the annex presents the multicollinearity in this particular study as indicated by VIF or tolerance tests. Among the independent variables, TELE, OPEN and SSER has multicollinearity problems with VIF of 121.564, 41.019, and 42.763 respectively; which are more than the rule of thumb of not more than 30. To avoid this problem the researcher has dropped each of these variables one by one form the model and got better improvement on the model significant level and the independent variables determining power.

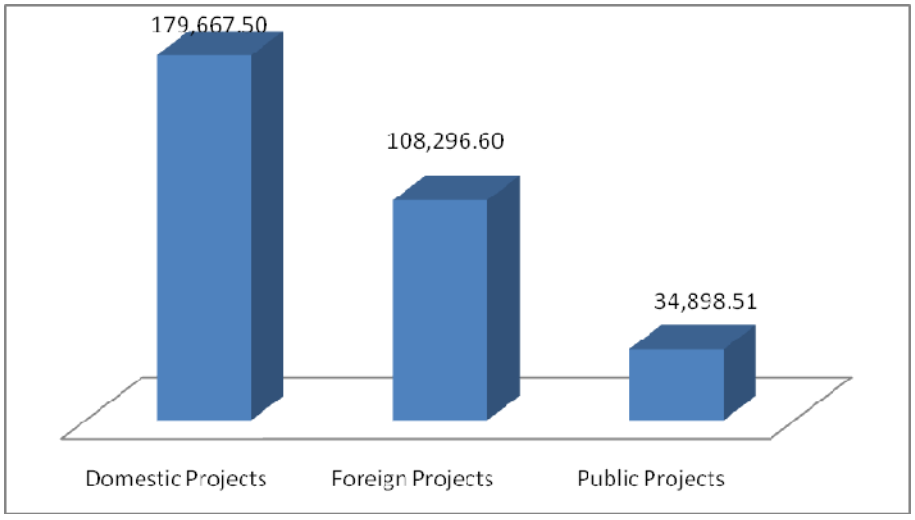
Furthermore, the residuals analysis has been undertaken to check lack of linearity of the variables relationship. As shown in table 7, at the annex, non-linearity cannot a problem in this study since the standard deviation of the constant variable; FDI (given under descriptive variables, i.e., 1.97992) is greater than that of the residuals (given under coefficients, which is 1.49281).

3.3. *Data Analysis of FDI in Ethiopia*

3.3.1. Share of FDI in Total Investment

As depicted in figure 1 below, during the years under consideration the EIC and RIOs have licensed a total of 25,835 investment projects involving Birr 322,862.6 million in capital. Of these projects, 22,489 (87 percent) were domestic, 3,267 (12.6 percent) foreign and 79 (0.3 percent) public. In terms of investment capital Birr 197,667.5 million (55.6 percent) was attributed to domestic investors, Birr 108,296.6 million (33.5 percent) to foreign investors and Birr 34,898.51 million (10.8 percent) to public sector.

Figure 1: Investment Capital In terms of Project Types 1992/93 – 2006/07



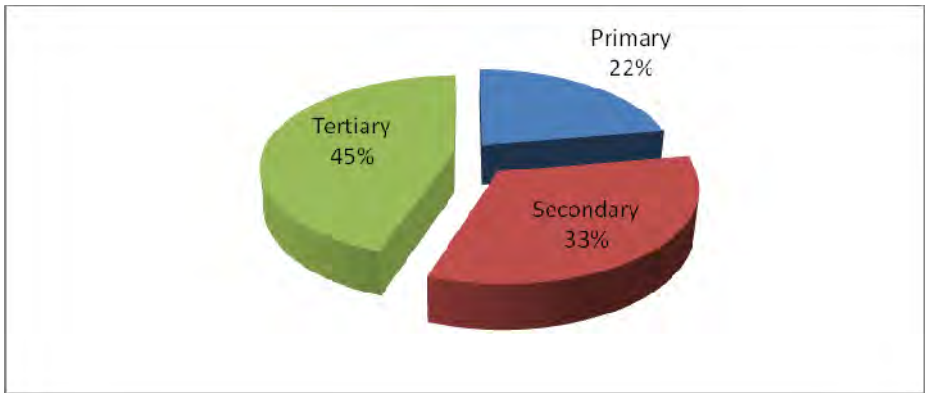
Source: EIC: Investment Statistical Abstract, personal computation.

Since 2002/03 for the last five years, investment has showed an accelerating trend. Between the year 2002/03 and 2006/07 alone, 18,645 projects with a capital of Birr 244.74 billion were licensed; accounting for 72 percent of the projects and about 76 percent of investment capital registered since early 1992/93. Recently in 2006/07 alone, a total of 6,472 investment projects involving capital outlay of Birr 93.6 billion were approved, the highest number in a single year since 1992/93. (For detail information see table 2. in the annex).

3.3.2. Industrial Distribution of FDI

Ethiopia's industry can, as in most countries and shown in EIC (2006/07), be divided in to three sectors; primary industry (agriculture, mining and petroleum); secondary industry (manufacturing, utilities and construction) and tertiary industry (services sectors and others).

Figure 2 : FDI in Economic Sector July 1992 to December 2008



Source: EIC: Investment Statistical Abstract, personal computation.

As clearly shown in the above pie chart and table 3 in the annex, the secondary industry has been the first sector attracting investors until 1995, which accounts for about 40 percent of the FDI projects. However, between 1996 and 2008 it accounted for only 23.9 percent of the total FDI inflows. The primary industry has remained at a constant low with an average of about 22 percent during the same period. However, there is a pattern change in the FDI trend. The tertiary industry has been the major sector for foreign investors. Its proportion increased rapidly from about 27.8 percent in 1995 to an average of 54.47 percent between the year 1996 and 2008. This is a traditional pattern for developing countries, starting with traditional industry sectors and moving towards tertiary industries (Pei, 2001).

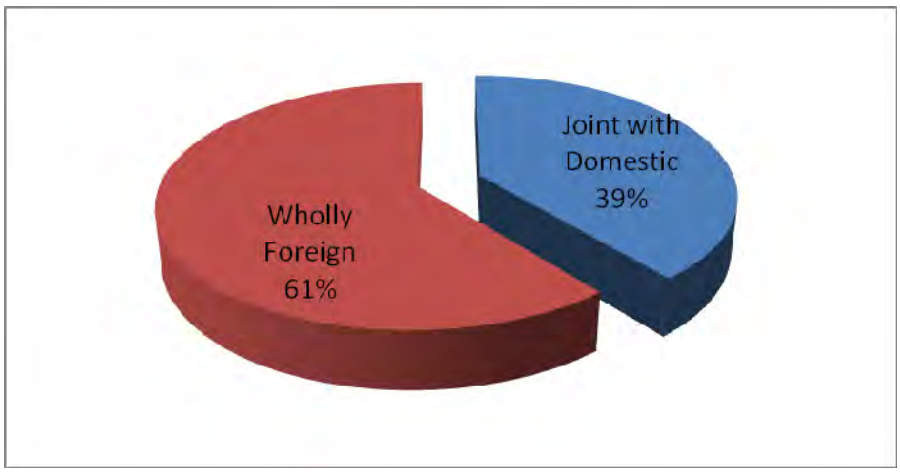
In terms of total capital invested also, the tertiary industry accounts the largest portion which is about 43.5 percent of the total 565,950,427,000 birr of FDI inflows between July 1992 and December 2008. The secondary industry and primary industry holds about 22.9 percent and 33.6 percent of the total investment respectively. (For more information see table 3 in the appendix).

3.3.3. Major Forms of Ownership

There are two major ways by which foreign investors acquire ownership through FDI. As per the EIC Annual Investment Statistical abstract, more than 75 percent of the FDI projects and about 61 percent of foreign capital are made through wholly foreign owned investment. The residual, which is 25 percent of the projects and 39 percent of

the capital are made joint with domestic investors (for more information see table 4 in annex).

Figure 3 : Amount of Capital Investment by Type of Ownership July 1992 - December 2008



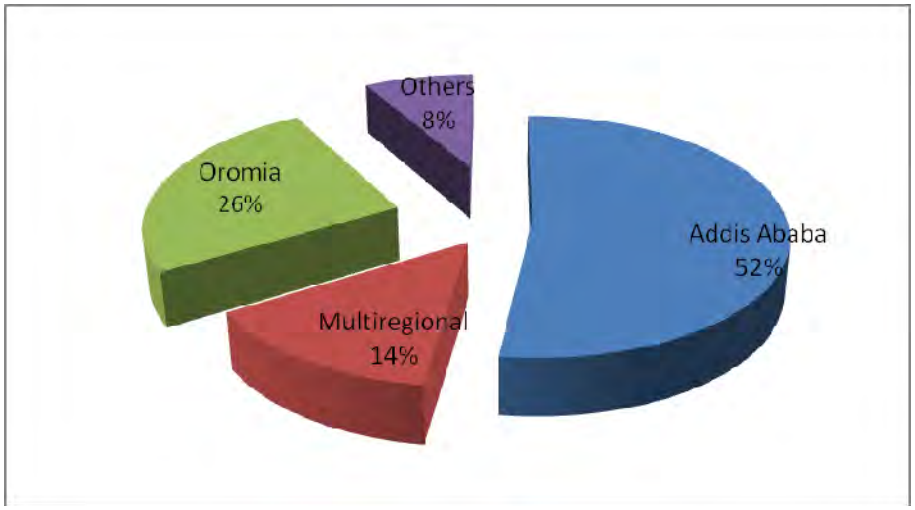
Source: EIC: Investment Statistical Abstract, personal computation.

3.3.4. Geographical Distribution of FDI in Ethiopia

Ethiopia, a country which has nine regions and two federal administrative towns, experience unevenly distributed FDI during 1992 – 2008. Out of the total numbers of FDI flows of 5,380 projects, more than half, 52.14 percent has implemented in the capital Addis Ababa, figure 4 below. Among the regional states, Oromia which is very adjacent to the capital, has received the largest number of projects stand at 1,373

(25.52 percent), followed by multiregional which has received about 14 percent (758 projects) while Amahara and SNNP each of which receiving less than 3 percent of the total FDI inflows. The others, including City Administrative Council of Dire Dawa has received less than a percent of total projects (see table 5 in the annex).

Figure 4 : Geographical Distribution of FDI in Ethiopia July 1992 – Dec.2008



Source: EIC: Investment Statistical Abstract, personal computation.

3.4. Model *Specification*

In the light of the above discussion the following multiple regression model is formulated to determine the impact of these variables (discussed under section 1.5. 1. above) on FDI in Ethiopia during 1991 – 2007.

As per our discussion under chapter two, FDI can be written as a function of those variables affecting its flows. Therefore, mathematically this can be defined as:

FDI = f(GDPGR, GDPPC, TELE, ELEC, INFLN, EXTDEBT, OPEN, SSER) --- (1)

Where:

FDI = Net FDI inflows percent of GDP

GDPGR = Potential market (Gross Domestic Product Growth Rate)

GDPPC = Market size (Gross Domestic Product Per Capita).

TELE = Infrastructure (telephone lines per 1000 peoples)

ELEC = Infrastructure (Electricity consumption per GDP)

INFLN = Macroeconomic stability (Annual rate of inflation based on CPI).

EXTDEBT = Financial Health (Ratio of external debt to export).

OPEN = Openness to trade (ratio of trade (export plus import) to GDP)

SSER = Education level (number of students at higher level education as percentage of total population.

As we can see above, this study covers the period 1991 – 2007 and the variables discussed in the previous section constitute time-series information, hence, the aforementioned model requires modification, thus the appropriate modeling strategy which involving the time series analysis and employed in this study can be given by:

$$FDI = \Omega + \beta_1 GDPGR + \beta_2 GDPPC + \beta_3 TELE + \beta_4 ELEC + \beta_5 INFLN + \beta_6 EXTDEBT + \beta_7 OPEN + \beta_8 SSER + \varepsilon \quad \text{---------- (2)}$$

Where:

Ω = constant

ε = Error variable

β_i = the change in FDI due to one unit change in respective independent variable (i= 1,2,3,…, 8) and all other variables are as defined in equation (1) above.

Based on this model (2), four regression has been undertaken and the results from regression are discussed in the following section resulted.

3.5. Regression Results

Correlation among Variables and Tests

Table 1 : Summary Statistics of FDI in Ethiopia 1991 - 2007

Variables	Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
FDI	17	.00	5.79	2.1512	1.97992	.553	-.804
GDPGR	17	-4.19	13.10	4.9965	6.27074	-.224	-1.421
GDPPC	17	92.07	201.00	123.2547	23.75015	2.310	7.251
TELE	17	.020	.130	.04765	.029692	1.623	2.487
ELEC	17	.20	.32	.2382	.03264	1.253	1.039
INFLN	17	-8.24	35.72	7.6576	9.97642	1.192	3.058
EXTDEBT	17	1.06	20.63	9.6653	6.55265	.514	-1.007
OPEN	17	10.83	62.92	35.3747	15.13165	.169	-.681
SSER	17	10.90	37.00	19.2588	8.74164	.798	-.767

Table 1 above shows the summary statistics for the dependent and independent variables. From this table we may take the following important concepts. The standard deviation column (Std. Deviation) shows that among the variables GDPPC

has more disbursed values around its mean, followed by openness and SSER while TELE and ELEC are more closer to their respective mean.

The Skewness column shows that GDPPC values during the study period are more asymmetry and has relatively long right tail in the normal distribution. Followed by TELE and ELEC. The only negative value for skeweness is for GDPGR which is assumed to have longer left tail.

Lastly, in the Kurtosis column we find that GDPPC has a relatively large positive value of kurtosis which insures the variable to have more clustered observations than the other variables thus; it is assumed to have longer tail than the normally distributed observations. This is followed by INFLN and TELE. On the other angle, GDPGR, EXTDEBT, FDI, SSER and OPEN has negative kurtosis and which indicates their respective observations cluster less and have shorter tails.

The regression results from the SPSS 15.0 given in the annex using tables 6 – 9 revels the following facts about the determinants. The result in table 6, computed by entering all variables simultaneously in to the package using the ENTER method, no one variables are there which determine the FDI at significant (see the coefficient table under table 6). The correlation table also shows that only three independent variables (EXTDEBT, OPEN and SSER) are correlated significantly with the dependent variable. Furthermore, there may be multicolinearity between TELE and SSER at 0.954; TELE and GDPPC at 0.920; TELE and ELEC at 0.931; and TELE and OPEN

at 0.889. The Collinearity Statistics table in its last two column shows that the tolerance value for TELE relatively approaching zero at 0.008 and its VIF value also become greater than 121. As a remedy to this problem of multicollinearity, the researcher has dropped this variable. As a consequence the adjusted R square is improved by 5.5% (see the model table under table 7 at annex) form only 43.2 percent under the first regression. The significance of the model has also been improved to 0. 055 from 0.107 before TELE variable is dropped from the model (see the respective ANOVA results under table 7 and 6 at annex).

To improve the model further the researcher again dropped the variable OPEN whose relative VIF are higher at 36.898 which is still more than the rule of thumb of 30 even after dropping TELE. The regression results at table 8 in the annex shows the consequence of dropping this and TELE variables. As a result the adjusted R square has increased to 53.1 percent which is more than the percentage of FDI expressed by the independents before dropping OPEN. More over the resulting model become significant now at F=4.019 and sig. of 0.026, which is less than 0.05 though still no one of the independent variables fulfill the requirement of significance of 5 percent. (see ANOVA and Coefficient table under table 8 at annex).

Lastly, the researcher dropped the next variable with highest VIF whose results shown in the table 9 at annex. After dropping SSER and the previous two variables simultaneously from the model, we get more improved model whose independent

variables together express about 55.2 percent of the dependents variance (model summary in table 9 at annex) and improved the significance level to 0.013, fifty percentages better than before dropping the variable. More importantly, one of the independent variable, EXTDEBT, becomes the most determining one at 0.008 significant level. Followed by ELEC at 0.057 and INFN at 0.082.

In summary, among the seven independent variables used in this study, only the EXTDEBT become the determinant of FDI in Ethiopia during the study period of last seventeen years since 1991. Every one percent increase in EXTDEBT will result in a decrease of FDI by 0.816 which is very significant. On the other hand, though they are not significant at 5%, as shown in the Coefficient output of table 9 at annex, a one percent increase in ELEC will also increase the FDI by 0.651 percent and a one percent decrease in INFLN will increase the FDI by 0.4 percent. The other independent variables in the study are not significant even at 10 percent level.

CHAPTER FOUR

Summary, Conclusion and Recommendation

4.1. Summary of Findings and Conclusion

In this study an attempt has been made to look at main features of investment in general and FDI at particular and to the determinants of FDI in Ethiopia. To this end, a review of theoretical explanation relating to the determinants of FDI has been made. Moreover, a review of related literature pertaining to determinants of FDI has also been made. The descriptive analysis I made and the empirical analysis conducted with the help of multiple regressions can be review as follows:

In terms of the share of FDI in the country's total investment we can say that it is promising but still lesser as compared to domestic investments. Most of the FDI investments made constitute huge capital as compared to the others; domestic and public investments.

The FDI in Ethiopia are unevenly distributed to few regions and the capital Addis. Most of the FDI investments are showing the changing trends from secondary investment to tertiary one, while the primary investments unlike most of the African countries are averaging minimal in Ethiopia.

More than three fourth of the FDI made in Ethiopia are wholly owned by the foreigners while the balances are made joint with domestic investors.

The most significant determinant of FDI in Ethiopia under the study periods are the financial health of the country, which was measured using the ratio of external debt to exports. This is because the financial performance (debt burden) of a particular country may put severe pressure on foreign exchange and thus importation of essential commodities.

The other important determinant of FDI in Ethiopia is the macroeconomic condition expressed as inflation which was measured by using the CPI. It revels the correct and expected sign. This may insure the assumption that the unstable economic condition can be one of the deterrents of FDI inflows. Thus, we can conclude that the stable economic condition can attract more FDI.

Lastly, relatively significant and positive coefficient of ELEC as proxy for infrastructure, highlights the importance of infrastructural development in order to attract more FDI into the country.

4.2. Recommendations

In view of promoting FDI in to the country;

1) The government, EIC and RIOs together, should formulate and implement effective investment promotion policies. Including regional marketing initiatives, but only after the fundamental determinants of FDI are in place. To improve the unevenly distribution of FDI in the country.

2) the government should create a healthy and enabling business environment that encourages both foreign and local investors, provides incentives for innovation and skills improvement and contributes to competitive corporate climate, through formulating policies to safeguard levels of competition, such as openness to international trade, efficiency-enhancing competition laws including the principles of non-discrimination, and establishment of effective enforcement agencies.

3) the government should improve its indebtedness measure as the ratio of external debt to exports, so that its effect on the exchange rate will be minimal.

4) the coefficient of the infrastructure variable (electricity consumed per GDP) highlights the need for big investment in infrastructural development, which is essential for the creation of a productive business environment. The concerned parties should give a great emphasis to upgrade the county's poor

infrastructure particularly in relation to transportation, power and telecommunication.

5) Lastly, to improve the effect of inflation, the government should focus on macroeconomic policy environment that strengthen the economy and builds the confidence of potential investors. Thus, necessary steps should be taken to improve the inflationary condition and stabilize the exchange rate through the adoption of sound fiscal and monetary policies.

Bibliography

Abdulai, D.N., 2007. "Attracting foreign direct investment for growth and development in Sub-Saharan Africa: policy options and strategic alternatives. *Africa Development*, 29 (2), pp. 1–23.

Agarwal, J. P., 1980. Determinants of foreign direct investment: a survey. *weltwirttschaftsliches Archiv*, 116 (3), pp. 739 – 773.

Aggarwal. 1997. Liberalization, internationalisation advantages and FDI: the Indian experience. *Transnational Corporations*, December, 6 (3), p. 55.

Assiedu, E., 2002. On the determinants of foreign direct incestmnt to developing countries: is Africa different? World Development, 30(1), pp. 107 – 19.

Assiedu, E., 2003. Foreign direct investment to Africa: the role of government policies, governance and political instability. Department of Economics, Universtiy of Kanasas.

Berry, W. D., 1993. *Understanding Regression Assumptions*: quantitative applications in the social sciences, No. 92. Thousand Oaks, CA: Sage Publications.

Cantwell, J., 2000. A survey of theories of international production, in the nature of the transnational firm, in Pitelis and Sugden. Nature of the Transnational Firm, London: routledge. Pp 13 – 17; 20 – 24.

Chakabarti, A., 2001. The determinants of foreign direct investment: sensitivity analysis of cross-country regressions, Kyklos, 54 (1), pp 89 – 113.

Fox, J., 1991. Regression diagnostics: quantitative applications in the social sciences. Thousand Oaks, CA: Sage Publications. Series No. 79, pp. 12-19.

Francisca M. B. and Suzanne N. C., 1996. The locational determinants of U.S. foreign direct investment in the European Union. *Journal of Financial and Strategic Decisions*, 9 (2).

Hakro A. N. and Ghumro A. A., 200?. Foreign direct investment, determinants and policy analysis: case study of Pakistan.

Kathryn L. D., 1995. Do exchange rate changes derive FDI? :University of Washington, The Journal of Business, 68 (3).

Kinoshita, Y. and Campos, N. F., 2002. The location determinants of foreign direct investment in transition economies. Department of Economics. Universtiy of Michigan Willioan Davidson Institute and CEPR.

Kumar, N., 2001. World Trade Organization emerging investment regime and developing countries: the way forward for TRIMS review and DOHA Ministerial meeting. Economic and politics weekly 8th August, 36(33), pp. 315 - 318.

Laura R.,1999. Determinants of FDI into the CEECs: New evidence from sectorial patterns . LICOS Centre for Transition Economics, Katholieke Unversitiet Leuven.

Lipsey, R. (2000). Inward FDI and Economic growth in developing countries. Transnational Corporations, 9 (1), pp. 66-95.

Miller, L. R., Acton C., Fullerton A. D., & Maltby J., 2002. SPSS for social scientists. New York: Palgrave Macmillan.

Morisset, P., 2000. Foreign direct investment to Africa: policies also mater. Transnational Corporations, 9(2), pp. 107 – 125.

Mwilima, N., 2003. Characteristics, extent and impact of foreign direct investment on African local economic development. Labor Resource and Research Institute (LaRRI), Windhoek, Namibia. December.

Nebende, A., Bende, J. L., Fordf S. S., and Slater J., 2000. Foreign direct investment locational determinants and the linkage between FDI and other macro economic factors, Graduate Centre for Business Administration, The Birmingham School, University of Birmingham, Edgbaston, Birmingham.

Negarit Gazzeta, Proclamation No 37/1996, 116/1998, 168/1999, 280/2002, and 373/2003.

Noorbakhsh, F., Palni, A., and Youssef, A., 2001. Human capital and foreign direct investment inflows to developing countries: new empirical evidence. World Development, 29 (9), pp. 1593 – 1610.

Obwona, M. B., Kenneth and Egesa, 200?. Foreign direct investment flows to Sub-Saharan Africa: Uganda country case study.

Pfeffermant, G. P., and Manaderssy A., 1992. Tends in private investment in developing countries. International Finance Corporation, Discussion paper No. 14, Washington D.C.

Root, Franklin, and Ahmed A., 1979. Empirical determinants of manufacturing direct foreign investment in developing countries. Economic Development and Cultural Change, 27(2), pp. 751- 67.

Ryan D. B., 2005. The determinants of FDI in Sub-Saharan Africa: theory and evidence. Leonard N. Stern School of Business. New York University

Saskia K.S., Wilhelm M, and Stanley D. W., 1998. Foreign direct investment and its determinants in emerging economies. African Economic Policy, Discussion Paper, July No. 9.

Schneider, F. and Frey B., 198). Economic and political determinants of foreign direct investment. World Development, 13 (2), pp. 161- 175.

Soboleva, N., 1999. Foreign direct investment and trade policy: an empirical analysis. Yale University.

Stephen P., Ferris, G., Rooney T., and Calvin V., 1997. An analysis of FDI in Latin America. Pakistan Economics and Social Review, xxxv (1), pp. 11- 24.

Udo, Eli A. and Obiora, I. K., 2006. Determinants of foreign direct investment and economic growth in the West African Monetary Zone: a system equations approach. University of Ibadan.

UNCTAD, 1998. World Investment Report: trends and determinants. United Nations Conference on Trade and Development. New York and Geneva, United Nations. Pp 89 – 106.

UNCTAD, 1999. World Investment Report: foreign direct investment and the challenge of development. United Nations Conference on Trade and Development. New York, Geneva, United Nations.

UNCTAD, 2002. Ethiopia: investment and innovation policy review," United Nations Conference on Trade and Development. New York, Geneva, United Nations.

Wells, L.T., Allen, L.J., Morisset, J. and Pirnia, N.,2001. Using tax incentives to compete for foreign investment: Are they worth the cost? Foreign Investment Advisory Service, Washington, World Bank.

Wheeler, David, and A. Mody 1992. International investment location decisions, the case of U.S. firms. Journal of International Economics, 33, pp. 57- 76.

Xing, Y. and Wan, G., 2004. Exchange rates and competition for FDI, WIDER Research Paper No. 2004 (64), UNU.

Annexes

Table 2: Areas of Investment Reserved for Government and Domestic Investors.

Areas exclusively reserved for the government:

- Postal services except courier services,
- Transmission and supply of electric energy through the integrated national grid system, and
- Domestic air transport using aircraft with a capacity of more than 20 passengers.

Areas exclusively reserved for domestic investors:

- Radio and television broadcasting services.
- Retail trade and brokerage.
- Wholesale trade (excluding supply of petroleum and its by-products) as well as wholesale by foreign investors of their locally produced products.
- Import trade.
- Export of raw coffee, oil seeds, pulses, hides and skins, and export of live sheep, goats and cattle not raised or fattened on own farm.

- Construction companies, excluding grade 1 contractor.
- Tanning of hides and skins up to crust level.
- Hotels other than star-designated hotels, motels, pensions, tearooms, coffee shops, bars, night clubs and restaurants (excluding international and specialized restaurants).
- Tour operations, travel agency, commission agency and ticket offices.
- Car hires and taxicabs transport.
- Commercial road transport and inland-water transport services.
- Bakery products and pastries exclusively for the domestic market.
- Grinding mills.
- Barbershops, beauty salons, smith workshops and tailoring (excluding garment factories).
- Building maintenance services, repair and maintenance of vehicles.
- Sawmills and manufacture of wood products exclusively for the domestic market
- Customs clearance services.
- Museums, theatres and cinema hall operations.

- Printing industry.

Source: Federal Negarit Gazeta Proclamation No. 37/1996 and 280/2002

Table 3: Number and Investment Capital of Total Approved Projects by Ownership between 1992/93 and 2006/07

Type of projects	Projects		Capital (in millions)		Year 2006/07	
	No.	Percent	Birr	percent	No.	Capital
Domestic Projects	22,489	87.05	179,667.5	55.65	5322	46,630.06
Foreign Projects	3267	12.65	108,296.6	33.54	1150	46,948.95
Public Projects	79	0.3	34,898.51	10.81	0	0
Total Projects	25,835	100	322,862.6	100	6472	93,579.01

Source: National Bank of Ethiopia Annual Report 2006/07

Table 4: FDI in Economic Sector July 1992 to December 2008.

Economic Sector	Project		Capital	
	Number	Percent	Birr	Percent
Primary	1,206.0	22.42	84,050,426.9	33.81
Secondary	1,768.0	32.86	105,019,601.6	42.24

Tertiary	2,406.0	44.72	59,531,878.5	23.95
Total	5,380	100	248,601,907.10	100

Source: EIC: Investment Statistical Abstract

Table 5 : Type of Ownership through FDI July 1992 – December 2008

Type of Ownership	Project		Capital	
	Number	Percent	Birr	Percent
Joint with Domestic	1,305	24.26	97,015,912.47	39.04
Wholly Foreign	4,075	75.74	151,549,994.60	60.96
Total	5,380	100	248,601,907.10	100

Source: EIC: Investment Statistical Abstract

Table 6 : Geographical Distribution of FDI in Ethiopia July 1992 – Dec.2008.

Region	Project		Capital	
	Number	Percent	Birr (in '000)	Percent
Addis Ababa	2805	52.14	51,814,117	20.84
Afar	17	0.32	3,745,063	1.51
Amahara	158	2.94	27,833,485	11. 2
B/Gumuz	20	0.37	303,051	0.12
Dire Dawa	51	0.95	6,942,850	2.79
Gambela	4	0.07	71,250	0.03
Harari	3	0.05	10,000	0.004
Multiregional	758	14.09	61,338,258	24.67
Oromia	1,373	25.52	87,624,724	35.25
SNNP	138	2.57	7,725,939	3.11
Somalia	11	0.2	85,490	0.034
Tigray	42	0.78	1,107,681	0.45
Total	5,380	100	248,601,907.10	100

Source: EIC: Investment Statistical Abstract

SPSS Output for Multiple Regresssion Using ENTER Method

Table 7: Regression Tables (1) Using All the Independent Variables

Descriptive Statistics

	Mean	Std. Deviation	N
FDI	2.1512	1.97992	17
GDPGR	4.9965	6.27074	17
GDPPC	123.2547	23.75015	17
TELE	.04765	.029692	17
ELEC	.2382	.03264	17
INFLN	7.6576	9.97642	17
EXTDEBT	9.6653	6.55265	17
OPEN	35.3747	15.13165	17
SSER	19.2588	8.74164	17

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	SSER, INFLN, GDPGR, GDPPC, EXTDEBT, ELEC, OPEN, TELE[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: FDI

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.846[a]	.716	.432	1.49281

a. Predictors: (Constant), SSER, INFLN, GDPGR, GDPPC, EXTDEBT, ELEC, OPEN, TELE

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44.893	8	5.612	2.518	.107[a]
	Residual	17.828	8	2.228		
	Total	62.721	16			

a. Predictors: (Constant), SSER, INFLN, GDPGR, GDPPC, EXTDEBT, ELEC, OPEN, TELE

b. Dependent Variable: FDI

Correlations

		FDI	GDP GR	GDP PC	TELE	ELEC	INFLN	EXTD EBT	OPEN	SSER
Pearson Correlation	FDI	1.000	.020	.294	.409	.402	-.208	-.653	.609	.565
	GDPGR	.020	1.000	.534	.457	.378	-.369	-.405	.492	.450
	GDPPC	.294	.534	1.00	.920	.804	.032	-.725	.827	.824
	TELE	.409	.457	.920	1.000	.931	.220	-.752	.889	.954
	ELEC	.402	.378	.804	.931	1.000	.250	-.589	.794	.879
	INFLN	-.208	-.369	.032	.220	.250	1.000	.114	-.062	.131
	EXTDEBT	-.653	-.405	-.725	-.752	-.589	.114	1.000	-.935	-.838
	OPEN	.609	.492	.827	.889	.794	-.062	-.935	1.000	.932
	SSER	.565	.450	.824	.954	.879	.131	-.838	.932	1.000
Sig. (1-tailed)	FDI	.	.470	.126	.052	.055	.211	.002	.005	.009
	GDPGR	.470	.	.014	.033	.067	.073	.053	.022	.035
	GDPPC	.126	.014	.	.000	.000	.452	.000	.000	.000
	TELE	.052	.033	.000	.	.000	.199	.000	.000	.000
	ELEC	.055	.067	.000	.000	.	.167	.006	.000	.000
	INFLN	.211	.073	.452	.199	.167	.	.332	.406	.308
	EXTDEBT	.002	.053	.000	.000	.006	.332	.	.000	.000
	OPEN	.005	.022	.000	.000	.000	.406	.000	.	.000
	SSER	.009	.035	.000	.000	.000	.308	.000	.000	.
N	FDI	17	17	17	17	17	17	17	17	17
	GDPGR	17	17	17	17	17	17	17	17	17
	GDPPC	17	17	17	17	17	17	17	17	17
	TELE	17	17	17	17	17	17	17	17	17
	ELEC	17	17	17	17	17	17	17	17	17
	INFLN	17	17	17	17	17	17	17	17	17
	EXTDEBT	17	17	17	17	17	17	17	17	17
	OPEN	17	17	17	17	17	17	17	17	17
	SSER	17	17	17	17	17	17	17	17	17

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.484	13.625		-.036	.973		
	GDPGR	-.128	.083	-.405	-1.535	.163	.510	1.961
	GDPPC	-.024	.076	-.293	-.321	.756	.043	23.452
	TELE	-48.296	138.582	-.724	-.349	.736	.008	121.564
	ELEC	36.789	43.278	.606	.850	.420	.070	14.327
	INFLN	-.078	.069	-.391	-1.130	.291	.297	3.365
	EXTDEBT	-.214	.279	-.707	-.766	.466	.042	24.016
	OPEN	-.036	.158	-.278	-.230	.824	.024	41.019
	SSER	.196	.279	.864	.701	.503	.023	42.763

a. Dependent Variable: FDI

Table 8: Multiple Regression Results (2) after Dropping the TELE variable.

Descriptive Statistics

	Mean	Std. Deviation	N
FDI	2.1512	1.97992	17
GDPGR	4.9965	6.27074	17
GDPPC	123.2547	23.75015	17
ELEC	.2382	.03264	17
INFLN	7.6576	9.97642	17
EXTDEBT	9.6653	6.55265	17
OPEN	35.3747	15.13165	17
SSER	19.2588	8.74164	17

Variables Entered/Removed [b]

Model	Variables Entered	Variables Removed	Method
1	SSER, INFLN, GDPGR, GDPPC, EXTDEBT, ELEC, OPEN [a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: FDI

Correlations

		FDI	GDP GR	GDP PC	ELEC	INFLN	EXTD EBT	OPEN	SSER
Pearson Correlation	FDI	1.000	.020	.294	.402	-.208	-.653	.609	.565
	GDPGR	.020	1.000	.534	.378	-.369	-.405	.492	.450
	GDPPC	.294	.534	1.000	.804	.032	-.725	.827	.824
	ELEC	.402	.378	.804	1.000	.250	-.589	.794	.879
	INFLN	-.208	-.369	.032	.250	1.000	.114	-.062	.131
	EXTDEBT	-.653	-.405	-.725	-.589	.114	1.000	-.935	-.838
	OPEN	.609	.492	.827	.794	-.062	-.935	1.000	.932
	SSER	.565	.450	.824	.879	.131	-.838	.932	1.000
Sig. (1-tailed)	FDI	.	.470	.126	.055	.211	.002	.005	.009
	GDPGR	.470	.	.014	.067	.073	.053	.022	.035
	GDPPC	.126	.014	.	.000	.452	.000	.000	.000
	ELEC	.055	.067	.000	.	.167	.006	.000	.000
	INFLN	.211	.073	.452	.167	.	.332	.406	.308
	EXTDEBT	.002	.053	.000	.006	.332	.	.000	.000
	OPEN	.005	.022	.000	.000	.406	.000	.	.000
	SSER	.009	.035	.000	.000	.308	.000	.000	.
N	FDI	17	17	17	17	17	17	17	17
	GDPGR	17	17	17	17	17	17	17	17
	GDPPC	17	17	17	17	17	17	17	17
	ELEC	17	17	17	17	17	17	17	17
	INFLN	17	17	17	17	17	17	17	17
	EXTDEBT	17	17	17	17	17	17	17	17
	OPEN	17	17	17	17	17	17	17	17
	SSER	17	17	17	17	17	17	17	17

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.843[a]	.711	.487	1.41808

a. Predictors: (Constant), SSER, INFLN, GDPGR, GDPPC, EXTDEBT, ELEC, OPEN

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44.623	7	6.375	3.170	.055[a]
	Residual	18.099	9	2.011		
	Total	62.721	16			

a. Predictors: (Constant), SSER, INFLN, GDPGR, GDPPC, EXTDEBT, ELEC, OPEN

b. Dependent Variable: FDI

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant	3.961	4.557		.869	.407		
	GDPGR	-.129	.079	-.408	-1.629	.138	.510	1.959
	GDPPC	-.048	.032	-.579	-1.527	.161	.223	4.489
	ELEC	31.566	38.568	.520	.818	.434	.079	12.610
	INFLN	-.093	.049	-.471	-1.921	.087	.533	1.874
	EXTDEBT	-.249	.248	-.823	-1.004	.342	.048	20.943
	OPEN	-.054	.142	-.411	-.378	.714	.027	36.898
	SSER	.119	.162	.524	.732	.483	.062	16.001

a. Dependent Variable: FDI

Table 9: Multiple Regression Results (3) after Dropping the TELE and OPEN variables.

Descriptive Statistics

	Mean	Std. Deviation	N
FDI	2.1512	1.97992	17
GDPGR	4.9965	6.27074	17
GDPPC	123.2547	23.75015	17
ELEC	.2382	.03264	17
INFLN	7.6576	9.97642	17
EXTDEBT	9.6653	6.55265	17
SSER	19.2588	8.74164	17

Correlations

		FDI	GDPGR	GDPPC	ELEC	INFLN	EXTDEBT	SSER
Pearson Correlati	FDI	1.000	.020	.294	.402	-.208	-.653	.565
	GDPGR	.020	1.000	.534	.378	-.369	-.405	.450
	GDPPC	.294	.534	1.000	.804	.032	-.725	.824
	ELEC	.402	.378	.804	1.000	.250	-.589	.879
	INFLN	-.208	-.369	.032	.250	1.000	.114	.131
	EXTDEBT	-.653	-.405	-.725	-.589	.114	1.000	-.838
	SSER	.565	.450	.824	.879	.131	-.838	1.000
Sig. (1-tailed)	FDI	.	.470	.126	.055	.211	.002	.009
	GDPGR	.470	.	.014	.067	.073	.053	.035
	GDPPC	.126	.014	.	.000	.452	.000	.000
	ELEC	.055	.067	.000	.	.167	.006	.000
	INFLN	.211	.073	.452	.167	.	.332	.308
	EXTDEBT	.002	.053	.000	.006	.332	.	.000
	SSER	.009	.035	.000	.000	.308	.000	.
N	FDI	17	17	17	17	17	17	17
	GDPGR	17	17	17	17	17	17	17
	GDPPC	17	17	17	17	17	17	17
	ELEC	17	17	17	17	17	17	17
	INFLN	17	17	17	17	17	17	17
	EXTDEBT	17	17	17	17	17	17	17
	SSER	17	17	17	17	17	17	17

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	SSER, INFLN, GDPGR, GDPPC, EXTDEBT, ELEC[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: FDI

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.841[a]	.707	.531	1.35594

a. Predictors: (Constant), SSER, INFLN, GDPGR, GDPPC, EXTDEBT, ELEC

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44.336	6	7.389	4.019	.026[a]
	Residual	18.386	10	1.839		
	Total	62.721	16			

a. Predictors: (Constant), SSER, INFLN, GDPGR, GDPPC, EXTDEBT, ELEC

b. Dependent Variable: FDI

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.481	4.185		.832	.425		
	GDPGR	-.134	.075	-.423	-1.791	.104	.524	1.908
	GDPPC	-.048	.030	-.577	-1.592	.142	.223	4.489
	ELEC	23.045	29.917	.380	.770	.459	.121	8.299
	INFLN	-.087	.044	-.440	-1.992	.074	.602	1.662
	EXTDEBT	-.171	.131	-.565	-1.299	.223	.155	6.460
	SSER	.109	.153	.482	.712	.493	.064	15.608

a. Dependent Variable: FDI

Table 10: Multiple Regression (4) Results after Dropping the TELE and OPEN and SSER.

Descriptive Statistics

	Mean	Std. Deviation	N
FDI	2.1512	1.97992	17
GDPGR	4.9965	6.27074	17
GDPPC	123.2547	23.75015	17
ELEC	.2382	.03264	17
INFLN	7.6576	9.97642	17
EXTDEBT	9.6653	6.55265	17

Correlations

		FDI	GDPGR	GDPPC	ELEC	INFLN	EXTDEBT
Pearson Correlation	FDI	1.000	.020	.294	.402	-.208	-.653
	GDPGR	.020	1.000	.534	.378	-.369	-.405
	GDPPC	.294	.534	1.000	.804	.032	-.725
	ELEC	.402	.378	.804	1.000	.250	-.589
	INFLN	-.208	-.369	.032	.250	1.000	.114
	EXTDEBT	-.653	-.405	-.725	-.589	.114	1.000
Sig. (1-tailed)	FDI	.	.470	.126	.055	.211	.002
	GDPGR	.470	.	.014	.067	.073	.053
	GDPPC	.126	.014	.	.000	.452	.000
	ELEC	.055	.067	.000	.	.167	.006
	INFLN	.211	.073	.452	.167	.	.332
	EXTDEBT	.002	.053	.000	.006	.332	.
N	FDI	17	17	17	17	17	17
	GDPGR	17	17	17	17	17	17
	GDPPC	17	17	17	17	17	17
	ELEC	17	17	17	17	17	17
	INFLN	17	17	17	17	17	17
	EXTDEBT	17	17	17	17	17	17

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	EXTDEBT, INFLN, GDPGR, ELEC, GDPPC[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: FDI

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.832[a]	.692	.552	1.32520

a. Predictors: (Constant), EXTDEBT, INFLN, GDPGR, ELEC, GDPPC

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.404	5	8.681	4.943	.013[a]
	Residual	19.318	11	1.756		
	Total	62.721	16			

a. Predictors: (Constant), EXTDEBT, INFLN, GDPGR, ELEC, GDPPC

b. Dependent Variable: FDI

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.542	3.881		.655	.526		
	GDPGR	-.121	.071	-.382	-1.705	.116	.558	1.791
	GDPPC	-.050	.029	-.604	-1.712	.115	.225	4.443
	ELEC	39.472	18.612	.651	2.121	.057	.297	3.362
	INFLN	-.079	.041	-.400	-1.916	.082	.644	1.554
	EXTDEBT	-.246	.076	-.816	-3.264	.008	.448	2.231

a. Dependent Variable: FDI