The Effects of Foreign Direct Investment on the Economic Growth in Developing Countries: Case Study of Cameroon

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ABSTRACT

This thesis aims to empirically investigate the impact of Foreign Direct Investment on economic growth and other relatively important factors which stimulate the process of economic growth in the economy of Cameroon between the periods of 1970 to 2012 by conducting the Autoregressive Distributed Lag (ARDL) Bounds testing approach for analysing the growth model derived. In order to explain the changes occurred in real GDP over the study period, the model retained two domestic factors (capital stock, and labor force), and one external factor Foreign Direct Investment (FDI) as independent variables. Recent analytical techniques have been used to diagnose and check properties of time series data then, the model has been estimated to determine the short and long-term elasticities and their significance. The empirical results points out that in the short and long-term, domestic capital stock and labor represent the driving forces for economic growth in Cameroon. In addition, FDI was found to have a positive but insignificant impact on economic growth in both the long and short-term periods in the case of Cameroon. Error-correction model has been used to support the existence of a stable long-term relationship and confirm a deviation from the long-term equilibrium following a short-term shock corrected by approximately 13 percent after each year.

Keywords: Economic Growth, Investment, FDI, labor, ARDL, Cameroon Economy

ÖZ

Bu tezin ana hedefi ampirik olarak Kamerun ekonomisindeki doğrudan yabancı yatırımın ekonomik büyüme üzerindeki etkisini ölçer. Ayrıca, fiziksel sermaye, ve işçi gücü sayısı gibi diğer göreceli faktörlerin ekonomik büyüme üzerindeki uzun ve kısa dönemli ilşkisini otoregresif dağıtılmış gecikme test ile ölçer (ARDL). Otoregresif dağıtılmış gecikme testi kullanılarak 1970 ile 2012 yılları arasında Kamerun'un ekonomik büyümesi incelenmiştir. Gayri safi milli hasıla'daki değişimlerin açıklamak için iki içsel (sermaye, ve emek) birde dışsal faktör kullanılmıştır. Ampirik bulgular fiziksel sermaye, ve işçi gücü sayısının hem uzun hemde kısa dönemli ekonomik büyüme üzerinde etkili olduğu belirlenmiştir. İleveten, doğrudan yabancı yatırımın ekonomik büyüme üzerinde uzun ve kısa süreli etkisi bulunamamıştır. Bunun paralelinde Kamerun ekonomisinde iş gücü'nün, fiziksel yatırımlardan ve diğer belirtilen faktörlerden daha etkin bir şekilde ekonomik büyümeyi etkilediği bulunmuştur. Kısa dönem hata düzeltme modelinde ise, tahmin edilen katsayıya göre uzun dönem dengesine ulaşma hızı yüzde 13 olarak hesplanırken kısa dönemli hatalar yıl bazında %13 düzelmektedir.

Anahtar kelimeler: Ekonomik büyüme; otoregresif dağıtılmış gecikme testi (ARDL); Kamerun ekonomisi, fiziksel sermaye, doğrudan yabancı yatırımın, işçi gücü sayısı

To my beloved family

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LIST OF ABBREVIATIONS

ARDL	Autoregressive distributive lag
CPI	Consumer price index
FCI	Foreign capital inflows
FDI	Foreign direct investment
HIPC	Heavily indebted poor country
ILO	International labor organization
IMF	International monetary fund
NIS	National investment society
OECD	Organization for economic co-operation and development
OHADA	Organization for the harmonization of business law in Africa
PRGF	Poverty reduction and growth facility
PRSP	Poverty reduction strategy paper
SDN	Society of nations
TFP	Total factor productivity
UN	United Nation

Chapter 1

INTRODUCTION

1.1 Contextual

In the 1960s, Africa has seen a tendency of political independences in several countries of the continent. These plunge African leaders in a skepticism fearing that economic development could lead to environmental pollution and the loss of their political power (Njong 2008). However, the economic slowdown experienced by African countries between 1970 and 1990 has increased the need for more FDI inside the continent. Before the independence of Cameroon, the government tried to encourage inflows of foreign capital in the economy.

The government at the national level, has established a series of legal instruments to boost the inflow of foreign capital Among which are: the investment code of 1990 Amended in 1994; the patent rights act, usually called Bangui agreement 1st of march 1977 Amended in February 1999; act trademarks act, also called Bangui agreement of march 1997, amended in February 1999. Also, at the international level, the government has equally done much among which are: the Paris agreement for the security and promotion of industrial property of 1883 reviewed at Stockholm in 1994, and the mutual venture agreements for the security and promotion of ventures in 1966 (Forgha, 2009).

These legal instruments have helped improving the annual average of foreign capital in Cameroon but this without any improvement in economic growth. They have instead led to a fast increase in unemployment rate, low technological breakthrough, and deterioration of living standards of the population (S. tang, Selvanathan and S. Sevanathan, 2008).

In 2004, several French companies had created ventures in Cameroon. Likewise, private investors and overseas banks were engaged in investments. According to United States Department of States (2009), as argued by several economists that MNCs Transfer capital, technological knowledge and management to the local corporations, it was projected that their existence in Cameroon would advance the trade and industry situation of the country. The Cameroon government applauded the augmented FDI inflows and overseas operations into the country and this because of the common belief shared with the leaders of other least developed countries that growth and development in the economy cannot be afforded by the native authorities.

Forgha (2009), presented a figure showing that in 1970, while the net FDI inflow came to 9.42 billion FCFA (Cameroon currency), the real GDP growth was 6.42 percent. Ten years later, in 1980, whereas the net FDI inflow rose to 59.90 billion FCFA, the real GDP growth detailed an adverse worth of 2.04 percent. Despite the global drift of FDI into Cameroon for 1986 and 1993 was optimistic, the real growth of GDP recorded an adverse worth of 6.14 on the average (Forgha, 2009).

Between 1994 and 2007, both trends were positive except in 1995, 1996, and 1999 where FDI detailed adverse worth of 227.93 billion, 154.22 billion, and 49.83 billion FCFA correspondingly.

The average annual inflow of FDI in Cameroon in 2008 and 2009 has increased by $ 270 million and $ 337 million respectively. This increase led to believe that some progress had been made but that was mainly due to higher oil prices. However, Cameroon's GDP growth in 2009 was negative with a value of 1.5 percent (UNCTAD, 2010).

Cameroon compared to some countries in the sub-Saharan area Such As Ghana, Liberia, and Nigeria experienced less GDP. These countries in 2009 recorded GDP growth of 4.6%; 3.5%; and 2.9 % respectively (M.B Francis, 2006). Cameroon being a bilingual country, its poor economic performance is difficult to justify because the country has the advantage of attracting FDI from francophone and Anglophone industrialized nations (Forgha, 2009). In current years, Cameroon has fascinated additional FDI this thanks to an improvement in the government policies, governance and other legitimate apparatuses. Nevertheless, poor economic growth still prevails. Therefore, this means that the motives for slow economic progress even with the increased FDI are not yet recognized and dealed with (Njong, 2008).

This study therefore seeks to explore the concepts of FDI and its influences on economic growth and development in the economy of Cameroon focusing on the periods between 1970 and 2012.

1.2 Historical Background

(Njong, 2008) explains that the economic activities in Cameroon knew the participation of multinationals companies (MNEs) in 1984 when Germany annexed the territory which later carried the name Cameroon. During that period, the Europeans considered Cameroon as an asset for their supply in agricultural products.

The Germans had set up large companies for the processing of agricultural products. Forgha (2009) argues that during the years next the liberation of Cameroon, FDI were seen as a malevolent that have adversely influenced the leaders on interior choice making, imported obsolete technology and caused the loss of control of domestic policies.

This perception of FDI has forced the Cameroonian authorities naturalize foreign companies and render more rigorous control of the public and private sectors in the economy. However, foreign investors through joint ventures and equity ownership have continued to participate in the economic activities of Cameroon justified by the increasing inflows of FDI in the country until the 1980s (Forgha, 2009). The Government of Cameroon before 1989 practiced a protectionism with many taxes on exports and imports of goods. By that time, the tax rate was set at 150% of the cost value insurance-freight (E. Bamou, TL Bamou and JP Tchanou 2006).

After 1989, following the implementation of structural adjustment program, the tax rate has been greatly reduced downwards (Njong, 2008). In order to increase and endorse overseas funds, the government of Cameroon has applied the suggestion made by the Economic Community of Central Africa that led to the devaluation of the FCFA (Cameroon currency). Several other policies had been implemented such as the privatization of the oil sector investment.

Cameroon's leaders continued to make efforts to encourage more FDI in the country. To this end, several legal instruments have been decreed among which are: the investment code of 1990 Amended in 1994; the patent rights act, also named Bangui

agreement 1st of March 1977 Amended in February 1999; trademarks act also called Bangui agreement of March 1997 amended in February 1999.

At the international level, the Paris Agreement for the Security and Promotion of industrial property of 1883, revised at Stockholm in 1994; Convention on the recognition and enforcement of foreign arbitral awards 7th of June 1959 and Mutual Venture Treaties for the Protection and Promotion of investment in 1966 (Forgha, 2009; Njong 2008).

To attract more FDI in Cameroon, there were also investment policy reforms. In 1963, some of these policies have been implemented the National Investment Society (NIS) was created (Forgha, 2009). Under the NIS, the state by forming joint ventures with private companies enjoyed most of the profit as a shareholder. Between 1990 and 2002, new investment policies have been introduced. One of these policies was to encourage competition between companies operating in Cameroon. This policy focused on the necessity of transforming primary product before making them available for export needs. This is how the national industrial zone of free exchange and the unit of management of the investment code have been set up to support the policy of the NIS. Both structures were tasked to formulate trade policies through tax relieve policies in order to encourage domestics and foreign investors (MINEFI, 2006).

The implementation of these laws has allowed Cameroon to attract large inflows of FDI. However, the increased inflows of FDI did not result in significant economic growth in the country but rather, to an increase in unemployment rate, low

technological advance, and a reduction in the level of living (United States Department of States, 2008).

Over the last years, Cameroon experienced a considerable growth of FDI inflows. In 2009, the average annual FDI was $ 337 million, but without any improvement on economic growth of the country (United States Department of States, 2009). Some researchers such as (Forgha, 2009; Kumo, 2009) focused on the determinants of FDI in Cameroon and others such as (Ajayi, 2008) on the country's economic growth.

This subjective investigation therefore seeks to investigate FDI inflows into Cameroon in rapports of their impacts on growth between the epochs of 1970 and 2012.

1.3 Theoretical Background

Aghion and Howitt (1987) presented the endogenous growth theory in order to understand how FDI can lead to growth in a country. (Acs, Braunerhjelm, Audretsch and Carlson, 2009) argue that the endogenous growth theory seeks to understand the interaction between high-tech acquaintance and different fundamental characteristics of the economy and society as well as identifying how such interaction leads to economic growth in a country. Some researchers such as (Buthe and Milner, 2008) are supporting FDI as an accelerator of evolution in emerging nations. This research work is founded on the postulation that FDI through positive spillover creates and enables economic growth in emerging nations such as Cameroon (Eden, 2008; Wijeweera and Dollery, 2010).

The endogenous growth theory explains That, FDI have optimistic effects on Economic Growth through awareness and high-tech spillovers. This theory based on the transmission of high-tech understanding presents invention and creation as the key factors for economic growth.

Ahmed (2008) explains that knowledge and technology are recipes that propel growth in a country. Following this assertion, Braunerhjelm and Carlson (2009) argue that research and development activities are suggested by the endogenous growth theory as motivational investment of new knowledge and thereby constitute an idea in the generation procedure of growth. This means that the increase in FDI inflows provide to local businesses talent and expertise which in turn allow them to innovate and create new industries and therefore helping to increase the growth in the recipient country. Dunning and Lundan (2008), explain that such spillover strengthens the economy of the host country when the advances multinationals companies operate in emerging nations such as Cameroon where technology is not advanced. The main thrust for evaluating FDI spillover from MNCs was to capture how FDI contribute in improving growth in the economy of host nation (Ofo-ri-Brobbey, Ojode, and Woldie 2010).

Lee, Baimukhamedova and Akhmetova (2009) studied in a cross regression framework the impacts of FDI on economic growth. The study showed that FDI was the thruster of technology transfer and was contributing to economic growth compared to domestic investments. FDI are increasingly recognized by researchers as accelerator of growth in developing countries. However, very little researches have been conducted to apprehend the motives why the augmented entry of FDI did

not improve economic growth in some emerging nations like Cameroon (Kemeny, 2010).

Hoang and Al (2010), by using a panel data model from 1995 to 2006, Studied the effects of FDI on economic growth in Vietnam. The results of the study revealed a positive growth. Empirical studies however, have shown inconclusive results on the effects of FDI on economic growth.

Li (2007) viewed at the FDI nexus. The results of the study rejected the idea that FDI boosts economic growth. Furthermore, other studies like that of Kasibhatla, Stewart and Khojasteh (2008) have been conducted on the part of FDI in high, middle, and low income nations through the epochs from 1970 to 2006. The results did back the idea that FDI complements economic growth. The study explored if FDI entries by complementing local venture of the beneficiary nation, donate to its economic growth.

The results excluded the hypothesis that FDI leads to growth in those countries. Also, some doubts have been casted on the legitimacy of emerging nations attracting FDI entries with the certainty that these will hint higher economic growth. Despite everything, endogenous growth theory argues that FDI leads to the economic growth of the beneficiary nation, by supplementing the investments.

1.4 Statement of the Problem

When a country is facing economic misery, the government of that country usually undertakes some structural adjustment programs aiming at revamping its economy. In the late 1980s, the advent of economic crisis forced the government of Cameroon

to undertake some structural adjustment programs favored by both the world bank and international monetary fund (IMF) in exchange of financial assistance and loans to the country.

Numerous of these structural adjustment program involved the need for FDI. Foreign direct investment can significantly play a great role in economic development in Cameroon if properly utilized. The short comings resulting from the poorly utilized funds invested by foreign donors may lead the country into more economic misery. FDI may result to the liberalization of the economy, privatization, devaluation of the country's currency, removal of subsidies in agricultural products, and lay-off of civil servants in both public and private firms. It is possible that between the periods of 1970 to 2012, FDI would have contributed to the economic growth and development of Cameroon. The statement of the problem leads to the following research questions.

1.5 Research Questions

1.5.1 General Research Question

Did FDI between the periods of 1970 to 2012 contributed to the economic growth of Cameroon?

1.5.2 Specific Research Questions

- Is there an impact of FDI on economic growth in the economy of Cameroon?
- Is there an impact of investment on economic growth in the economy of Cameroon?
- Is there an impact of labor force on economic growth in the economy of Cameroon?

1.6 Aim of the Study

This thesis aims to explore Foreign Direct Investment and its influences on economic growth and enlargement in the economy of Cameroon between the periods of 1970 to 2012.

1.6.1 Objective of the Study

This study will find out whether:

- Foreign Direct Investments complement growth and development in Cameroon.
- Foreign Direct Investments should be encouraged or discouraged in Cameroon.

1.7 Significance of the Study

In today's business world, FDI is a controversial issue as some commentators are of the opinion that FDI is a new form of dependency replacing colonialism, centered on high returns and not taking into account the well-being of people. For them, FDI is beneficial only to developed countries while doing little if anything to improve the economies of under developed countries. Others are of the opinions that to overcome poor growth and development, FDI is most likely the only engine of their economic transformation.

It therefore remains a matter of economic analysis to support which of the opinion one upholds. This study is significant in that it would be able within the purview of the data so far gathered whether FDI have contributed to the economic growth of Cameroon, and whether there are some undesirable effects caused by FDI within the economy of the country. Thus, it is hoped that this work would serve as a basis of a

springboard for further research in this area, or that it could one day serve as useful source of information for future works on the economy of Cameroon.

1.8 Structure of the Study

This thesis is organized as follow: in chapter two the review of the relevant literature on FDI and economic growth is presented; chapter three contains an overview of Cameroon economy. Chapter four describes the data, the methodology adopted, and the theoretical modeling. Chapter five presents the regression model and discusses the empirical results. Finally, chapter six presents the concluding remarks as well as the recommendations and suggestions for further studies.

Chapter 2

RELATED LITTERATURE ON FDI

2.1 Introduction

In the development literature, the role of FDI on economic growth remains questionable. Empirically, several studies have highlighted the positive impact of FDI on growth, while others have shown its negative impact. On the basis of empirical evidence from developing countries, Chenery and Strout (1996) concluded that, FDI has an optimistic impact on economic growth. These inconsistent results could be explained by numerous methodological and conceptual factors, the lack of a comprehensive harmonized dataset, different definitions of FDI as well as various econometric specifications. This section discusses the concept of FDI then, presents the forms of FDI. It then presents a descriptive background on FDI inflows into Cameroon. Finally it presents the recent findings on the relationship between FDI and economic growth.

2.2 Concept of FDI

Mankiw (2004) describes FDI as an investment owned and operated by a foreign entity. He argues that FDI differs from indirect investments such as portfolio investments where foreign entities invest in equities listed on a country's stock exchange.

Daniels, Readebaugh, and Sullivan (2004), following the previous definitions, explain that FDI can be said to exist solely when the investment, in addition to at

least 10 percent shares, give the investor the control of the company. They highlight the element of control arguing that even though 100 percent shares of a company may be owned by a foreign investor, he may not have the control of the company if regulations in the host country do not permit this. All the countries around the world have laws and regulations. In Cameroon, there are regulatory agencies placed under specific ministries and playing a supervisory role.

Keegan and Green (2002), present FDI as an investment resulting from the desire of having direct or partial ownership of operations outside the home country. Therefore, the concept of FDI is articulated on the desire of owning a foreign investment, making the highest possible gain from it, and exercising control over the entity. The distinctive feature is that FDI, in addition to the transfer of resources (capital), involves also the acquisition of control. Control is extremely important because the investing company rather than doing what is supposed to be best for its operations in a specific country may want to do what is best for its global operations.

Proponents of FDI explain that government should not have interest in private investments from abroad. However critics are of the opinion that the national interest of a host country will ache if MNEs make decisions not in line with its own national or global objectives. For example, a multinational corporation can undertake decisions about employment or relating to an industry that is off national pride from its headquarters.

This means that control is a huge concern for host countries. Recipient government's controls do not have negative impact on the firm; rather, ensure sustainability to the benefits and advantages of both the home and foreign countries.

Multinational Corporation (MNC) is a key feature of FDI. There is not yet a general agreement on the definition of MNC and this because some of the definitions point out structural criteria such as the number of countries in which the corporation operates or nationality and composition of the top management. Other definitions emphasize performance characteristics such as sales assets, amount of earnings. Also, other definitions focus on the behavioral characteristics of top management to think internationally. However, Pitelis, Christos, and Roger Sugden (2000) define multinational corporations (MNCs) as organizations owning or controlling production of goods or services in one or several countries out of the home country.

2.3 Approaches to FDI

There are several forms of FDI and the common of which are:

2.3.1 Direct Investment

Direct investment, also called Greenfield investment is the type of FDI which consists of creating the affiliate of a company overseas. Direct investment main purpose is gaining enough of a company in order to take control over future decisions. This can be done by gaining for example a significant minority or a majority interest. Greenfield investment is very common in developing countries lacking capital and facing crisis. The World Bank and the IMF championed the Greenfield investment in Cameroon during the period of crisis. The results of this action are plausible since it led at revamping the economy, reducing unemployment, and increasing wages.

2.3.2 Joint Venture

Joint venture is commonly demarcated as a predetermined covenant putting two or multiple persons with the determination of executing a precise venture. Joint venture presents some advantages in that it is a risk sinking appliance in new market

diffusion, and allows the pooling of resources for financing large projects. Nevertheless, this type of investment presents various problems including equity ownership, as well as operational control and distribution of profits or losses.

2.3.3 Mixed Venture

Mixed venture is the type of FDI in which the government of the host country owns part of the shares together with a foreign company. Mixed venture is a sort of joint venture though Cameroon has a number of corporations, industries and firms in which Cameroon's government acts as a shareholder with other countries. As example, the Cameroon airlines corporation, the national railway corporation, etc. The different approaches to FDI mentioned above usually, take the form of multinational corporation (MNC).the general belief about the MNC has been that they are unfeeling exploiters.

Meyer (2005) explains that MNCs are the origin cause of the collapse of world economic advancement extending from sweatshop working conditions, earnings inequity and conservational toxic waste. Conversely to Meyer, followers of MNCs such as David and Nigel (2007), argue that the profits arising from MNCs cannot be overstated as well as the allotment of abilities, technology intercontinental, and the transfer of technology from the technologically advanced countries to the emerging countries. But whether the first characteristic is true or not, it remains a matter of appreciation or research.

2.4 An Overview of Growth and FDI Inflows into Cameroon

2.4.1 Changes in Real GDP

From the independence of Cameroon in 1960, up to 1985, the country experienced a period of sustained economic growth, particularly between 1977 and 1985. The

annual rate of economic growth during that period was around 10 percent (Figure 1). However, from 1986 to 1994, the country dived into a serious economic crisis leading to a fall of almost 50 percent in GDP per capita, to public finance imbalances and unsustainable indebtedness, as well as to an accumulation of significant external and domestic payment arrears.

After the devaluation of the CFA Franc in1994, the country recovered economic growth at the rate of about 4.5 per cent per year. Given the growth rate of the country's population, the growth rate of the economy in recent years has hardly been higher than 3 per cent, and it has led to a stagnation of GDP per capita. This growth rate remains far below the targeted 6 percent which was set in the poverty reduction strategy paper (PRSP) in 2003, and was supposed to reduce the incidence of poverty in Cameroon by 50 percent by the 2015 horizon.

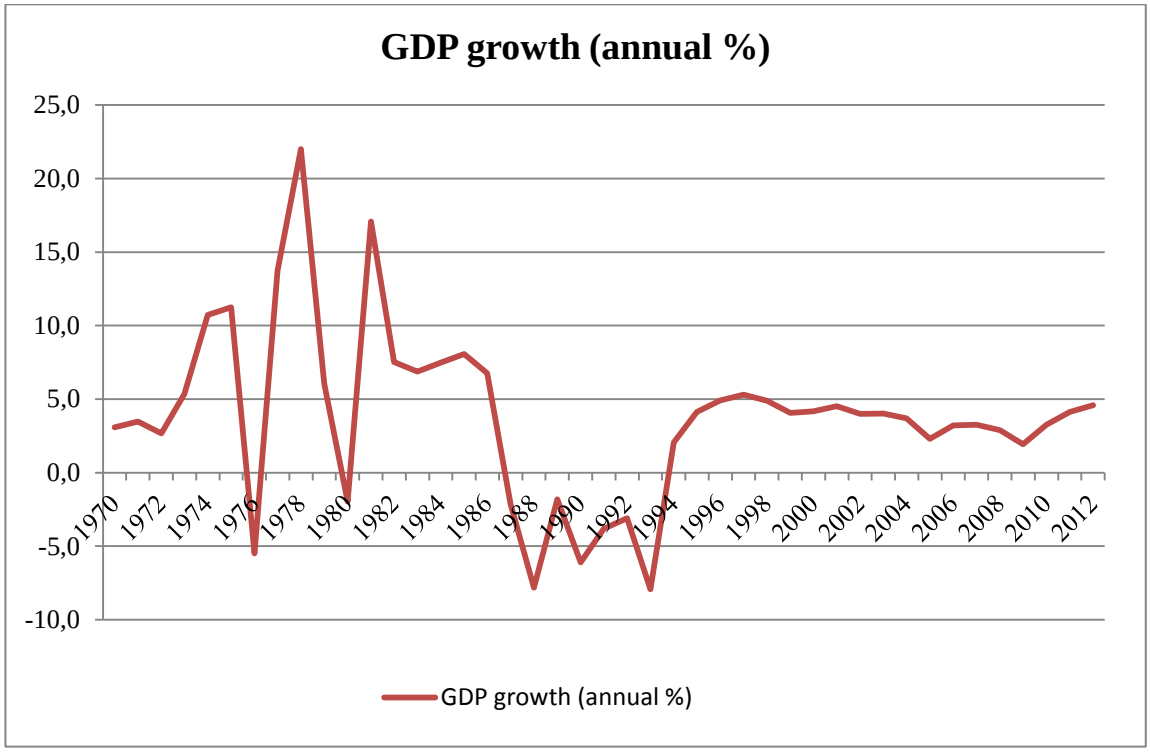

Figure 1. GDP growth rate in Cameroon 1970-2012. ©World Bank Databank (2015)

2.5 FDI Inflows into Cameroon

Cameroon, similar to other developing countries, views FDI as the main key for boosting its economic growth. Karim and Ahmad (2009), explain that in developing countries such as Cameroon, it is believed by the leaders that FDI will generate more capital for investment, and assistance to domestic firms for being more productive, competitive by investing in human capital and by adopting efficient technology. Most of the fast growing countries depend on capital inflows from FDI to support their growing economy.

Johnson (2010) argues that, African emerging nations from Africa such as Cameroon need FDI to speed up their determinations in economic enlargement. It is the hope and certainty of Cameroon's leaders that more capital inflows from FDI into the country would lead to the creation of employment opportunities which in turn would lead to an increase on the level of output and therefore, an increase an increase on economic growth.

FDI inflows into Cameroon are mostly in the form of direct investment with a significant share of portfolio investment. UNCTAD (2002) explains that, although FDI inflows into Cameroon are still limited, they are increasing. The evolution of FDI inflows into Cameroon over the period 1970-2012 is presented below (figure 2).

The figure shows that during the 1970s, and the mid-1980s, there was a regular evolution of FDI inflows into Cameroon. Between 1980 and 1985, the country experienced high volume of FDI amounting to $112.3, 117.6, 89.2, and 283.7 million in 1980, 1981, 1982, and 1985 respectively.

The economic growth achieved by the country between 1970 and 1985 could be the right explanation of this favorable trend in FDI which made it feasible for the government to undertake investment projects for improving the living conditions of populations. Cameroon experienced a massive disinvestment between 1985 and 1994 amounting to $67, 103, and 11 million in 1986, 1990, and 1991 respectively. This was due mainly to the severe economic crisis the country experienced between 1986 and 1994 following the fall in the prices of oil, and the export of the country's agricultural commodities in international markets.

This crisis led to a total disruption of the business environment and a deterioration of economic and commercial activities until corrective measures were implemented by 1994-1995 with the assistance of the international financial community.

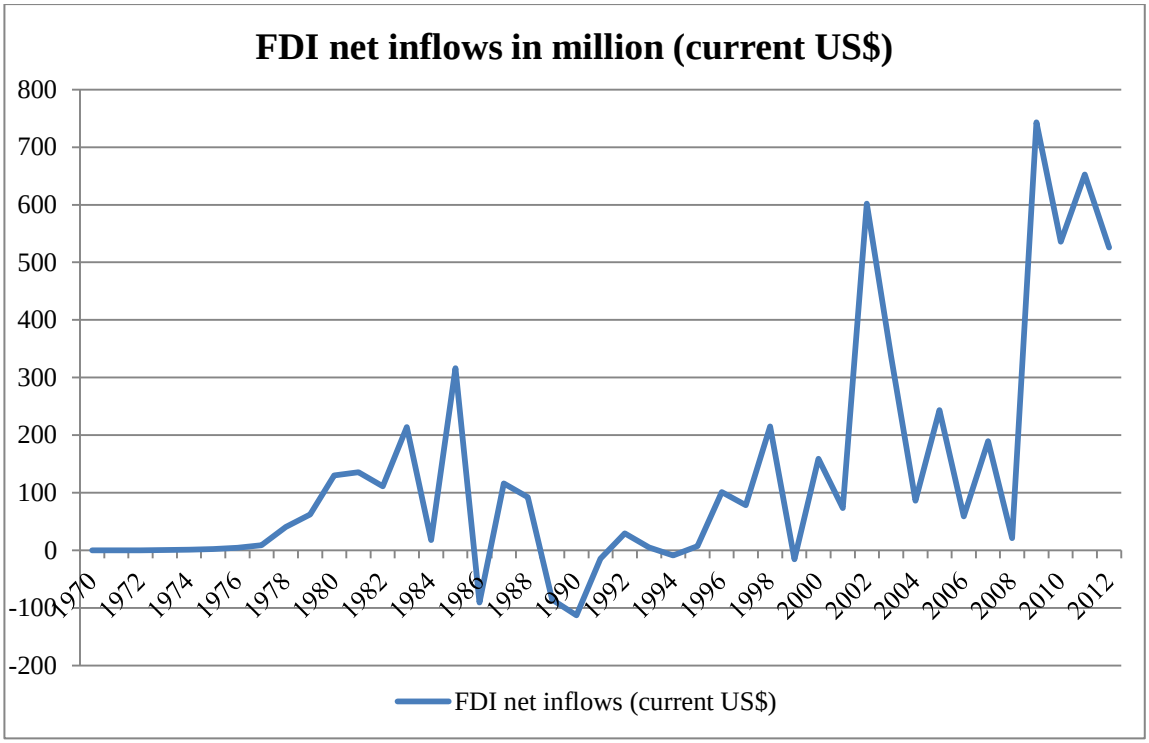

Figure 2. FDI net inflows into Cameroon 1970-2012. ©World Bank Databank (2015)

Between 1996 and 2000, FDI inflows hovered between $97million and $197 million owing, on one hand, to the implementation of the privatization process which led to foreign companies investing heavily in the country and, on the other hand, to the effects of economy recovery which was essentially brought about by the depreciation of the CFA Franc against French Franc in 1994. In 2002, FDI inflows reached $547 million and fell to $321 million in 2007. FDI inflows between 2002 and 2003 were mostly generated by the construction of the Chad-Cameroon oil pipeline.

Despite the potential of the country for attracting FDI, Cameroon is seen by foreign investors as a high-risk area for investment when the political and economic situation of the country deteriorated in the early 1990s.In January 1994, when the CFA Franc has been devaluated against the French Franc, FDI inflows have been increasing steadily, and was driven almost exclusively by privatization and investment in the oil sector (EIU 2002). However, in recent years, FDI inflows have slowed down due notably to the country's political uncertainty, institutional weaknesses, low labor productivity and corruption.

2.6 FDI and Economic Growth

Several scholars are widely recognizing the role of FDI as a factor promoting growth in developing countries, and the link between FDI and economic growth led to a vast empirical literature centered on both developed and developing countries. Neoclassical and endogenous growth theories have been the starting point for many empirical studies exploring the linkage between FDI and growth. According to the neoclassical growth theory, economic growth usually comes from two major channels which are the accumulation of factors of production and total factor productivity (Felipe, 1997).

Endogenous growth theory, contrary to the limited contribution giving credence to FDI through the neoclassical growth theory argues that FDI complements growth through capital formation and technological transfer (Blomstrom et Al, 1996).

The literature on endogenous growth theory explains that they are three major channels through which FDI affects growth. First, by introducing new technologies and new inputs, FDI increases capital accumulation in the beneficiary nations (Borensztein et Al, 1998). Second, by training workers and managers on the job, FDI increases the levels of knowledge and skills in recipient countries (de Mello, 1999). Third, by overcoming barriers to entry and by reducing the market power of existing firms, FDI boosts competition among the industries in the recipient countries.

The role of FDI in recipient countries is suggested by several empirical studies as an important source of capital. Chowdhury and Mavrotas (2005), explain that FDI complements domestic investments, improves human capital, the level of technology, and stimulates overall economic growth in the host countries. However, some studies carried out at the level of firms such as that by Carkovic and Levine (2005), and that by Gorg and Greenway (2004), do not support the view that FDI boosts growth in the host countries.

Moreover, at the macroeconomic level, several empirical studies on the link between FDI and growth concluded that in developing countries, FDI has an optimistic influence on economic progress under specific conditions involving factors such as their degree of openness, their level of human capital, their financial market regulations, and banking systems.

De Mello (1997) carried out a study on the role of FDI boosting economic growth. This study presents two main canals through which FDI can affect growth in a country. First, FDI through the external effect of capital may encourage the adoption of new technologies in the production process, and Second, FDI can stimulate the transfer of knowledge (in terms of acquisition of skills). OECD (2002) agrees with these observations by explaining that 11 studies out of 14 have shown a positive contribution of FDI to growth as well as factor productivity.

More specifically, de Mello and the OECD explain that a certain level of education and infrastructure development must be achieved by developing countries for them to be able to make efficient use of the potential benefits linked with FDI. Therefore, in less advanced countries, FDI seems to have limited effects on growth.

The result of the OECD (2002) is that it exist a relation among FDI and growth. The general consensus although the relationship is diversified across countries is that on average FDI impacts growth. Empirical studies on the relationship between FDI and growth in developing countries are providing diverse results in nature. Therefore, some of the studies are presented below.

Blomstrom et Al (1992), find that in developing countries, per capita growth has a positive relationship with the average FDI inflows to GDP ratio. Other study by Borensztein et Al (1998) conclude that FDI affects growth negatively, and positively only if it is tied with human capital accumulation. On the other hand, de Mello (1999), in his study concludes that the growth effects of FDI are strongly associated with the relationship between FDI and domestic investments.

Zhang (2006), using panel data techniques analyses the impact of FDI on economic growth in China between the periods of 1992-2004. The study concludes a positive impact of FDI on growth.

Kim and Bang (2008), focusing on Ireland used annual time-series data covering the period from 1975 to 2006 to capture the long and short-terms relationships between FDI and economic growth by performing the ARDL approach. The results reveal that statistically, in both the long and short-terms, FDI impacts significantly on growth.

Athukorala (2003), using co-integration approach analyses the impacts of FDI on economic growth in Sri Lanka by using annual time-series data for the periods of 1959 and 2002. This study led to inconclusive results. The impact of FDI on economic growth is not strong enough and this because of bad laws, corruption, and poor governance.

We conclude this review of the literature on the link between FDI and growth by observing that in general FDI has been viewed as a factor which promotes by complementing domestic savings in developing countries, and by providing additional technologies and knowhow they need to boost their economic development.

Nevertheless, it should be emphasized that for FDI to have positive effects in developing countries, police makers in those countries must design and implement good development policies and provide foreign investors with incentive packages that are acceptable.

After all, a deep analysis of the preceding literature reveals that some of the studies (cross-section studies, and country regressions) are limited in terms of robustness as well as the methodologies used. Hoeffler (2002) explains that cross-section studies and country regressions make it difficult to bring out policy implications for a specific country because these studies provide information for the whole countries selected not for a particular country.

Furthermore, the lack of consensus on the impact of FDI on growth suggests that studies for specific countries should be carried out in order to understand the particular nature of each individual country. Therefore, the present study on Cameroon will supplement the existing literature on the effects of FDI on economic growth.

Chapter 3

ECONOMIC OVERVIEW: CAMEROON

3.1 Introduction

The republic of Cameroon is a country located in central Africa to the north of the gulf of Guinea (Atlantic Ocean). The country is a former German colony mandated after the First World War (1919) by the League of Nations to British and French rule. In 1946, still under British and French rule, Cameroon became a trust territory of the united nation organization (UN). The country is bordered to the West by Nigeria, to the North West by Chad, to the East by Central African Republic, to the South East by Congo (Brazzaville), and to the South by Equatorial Guinea. Cameroon has a surface area of 475,442 Km^2 (land 469,442Km^2; water 6000Km^2).

Cameroon's highland in central and west offer a cooler climate and an average altitude of 1100 meters; the region is rich in volcanic soils favorable for agriculture (coffee, banana, cocoa, wood, rubber, etc.). Douala is the largest city and represents the country's main port and economic capital with its commercial and industrial activities. Yaoundé is the second largest city and the political capital of Cameroon.

English and French are official languages although French is by far the most understood language. Because of its modest oil resources and favorable agricultural conditions, Cameroon has one of the best endowed primary commodity economies in sub-Saharan Africa. Cameroon GDP, purchasing power parity (PPP) for 2012 is

$50.85 billion compared to $45.93 in 2005 (World Bank, 2014). This positive trend is due mainly to the contribution by agriculture, industry and services sectors. However, Cameroon similar to other developing countries faces several problems among which are: corruption, stagnant per capita income, inequitable distribution of income, and an unfavorable climate for business enterprise.

3.2 Economic Structure

Cameroon's economy in sub-Saharan Africa is one of the best gifted with primary economic merchandises. Over the past year, its growth has been strongly influenced by the activities of the oil and agricultural sectors whose revenue in 2012 represents 51% and 15.67% of exports respectively.

On the Demand side, consumption represents 75% of GDP and investment 23%. On the supply side, the primary sector (agriculture) is the most important component of the economic structure. It employs the majority portion of the labor force (70%), and contributes approximately 20% to the GDP. However, the growth in this sector has been slowed due to factors such as: the poor quality and inadequacy of rural infrastructures, constraints related to the financing of production.

The secondary sector (industry) contributes for almost 27% of the GDP while providing employment for 13% of the labor force. In this sector, there is a downward trend of activities due to the weak competitiveness of agro industries and the saturation of electric power supply capacity. The tertiary sector (services) employs 17% of the total labor force and contributes approximately 52% to the annual GDP. Table 1 presents the share of different sectors in real GDP between 2005 and 2012.

Table 1. Percentage share of different sectors in real GDP.

Fiscal year	Agriculture	Industry	Services	GDP growth rate
2005	20.6	32	47.40	2.30
2006	21	33.23	45.75	3.22
2007	22.9	29.81	47.29	3.26
2008	23.43	28.97	47.60	2.88
2009	23.48	30	47.62	1.93
2010	23.39	29.92	46.69	3.27
2011	23.57	29.6	46.85	4.14
2012	23.18	30.24	46.58	4.59

Source: ©*World Bank Databank* (2015)

The contribution made by the service sector was the driving force of the economy for the last five years, and was mainly contributed by a gradual recovery in household purchasing power boosted by the repurchase of domestic bonds by the public treasury.

The privatization of the mobile phone networks as well as port and roads renovation have improved the vigor of the communications and transport sectors. This positive figures recorded by Cameroon's economy is due partly to some adequate fiscal and monetary policies. Cameroon in June 2000 was admitted into the heavily indebted poor countries (HIPC) initiative. It made the country eligible for debt relief upon implementation of economic reforms.

The same year, the country signed an agreement with the international monetary fund (IMF) giving it access to about $139 million in poverty reduction and growth facility (PRGF). Despite the low price of oil and a huge debt service, these measures led to a

worthy improvement in government finances. The HIPC and the PRGF funds as well as the devaluation of the currency resulted in an increase of trade contribution to GDP from 38% in 1994 to approximately 50% in 2012 (World Bank 2014). Although the country faces some ills including corruption and government circles, it is quite clear that the present economic structure of Cameroon has led to an improved economy.

3.3 The Business Environment and Competitiveness

3.3.1 The Business Environment

From the independence in 1960 till the early 1990s, Cameroon had a closed economy with strict regulations against private and foreign investors. In the early 1990s, the IMF and the World Bank provided a financial assistance to the country that led to a series of economic reforms bringing Cameroon's economy in synchronization with the global standard. These reforms were based on increasing agricultural productivity, stimulating the business environment and finally, restructuring the banking sector.

Despite the ongoing reforms, Cameroon ranks one of the lowest in term of doing business index. The 2009 doing business report ranked the country 164th out of 181 countries assessed in the report regarding ease of doing business; and 32nd out of 46 countries in sub-Saharan Africa. However, of the 16 OHADA member countries, Cameroon ranked 7th in terms of ease of doing business.

3.3.2 Competitiveness

Due to several constraints including the saturation of electric power supply capacity, inefficient port services, and a poor densification of the road network, Cameroon faces high costs of factors of production. However, with regard to the stability of the

macroeconomic framework based on an analysis of the pillars of the global competitiveness index which ranks 131 countries, Cameroon's ranking is relatively satisfactory. The table in (appendix 1) presents the global competitiveness index between 2007 and 2008. It should be emphasized that this index provides a complete overview of all critical factors promoting productivity and competitiveness.

It shows that infrastructures (123rd ranking), and the complexity of financial markets (125th ranking) are areas where the country's performance is weakest. Also, the low competitiveness of factors is explained by the market efficiency (110th ranking), complexity of business climate (112th ranking), and training (113rd ranking). Finally Cameroon is ranked 116th by the global competitiveness index.

3.4 Macroeconomic Variables

3.4.1 Inflation

Inflation, as measure by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals such as yearly (World Bank 2014).

Most countries try to maintain the level of inflation somewhere around 2 and 3% per year that is too low to cause any problems for the households and businesses. At the same time, it is comfortably away from deflation (negative inflation).

From 1970 to 1993, the average inflation rate in Cameroon was 7.98%. In 1994, when the FCFA (Cameroon currency) was devalued against the French Franc, the country's inflation reached 35.09% leading to an increase in GDP growth from -7.93% in 1993 to 2.06% in 1994. However, the years after 1994, the level of inflation

has been reduced from 9.06% in 1995 to 2.94% in 2012 with a GDP growth rate of 4.12% and 4.58% respectively. Figure 3.1 shows Cameroon's inflation as measured by the consumer price index (CPI) between 1970 and 2012.

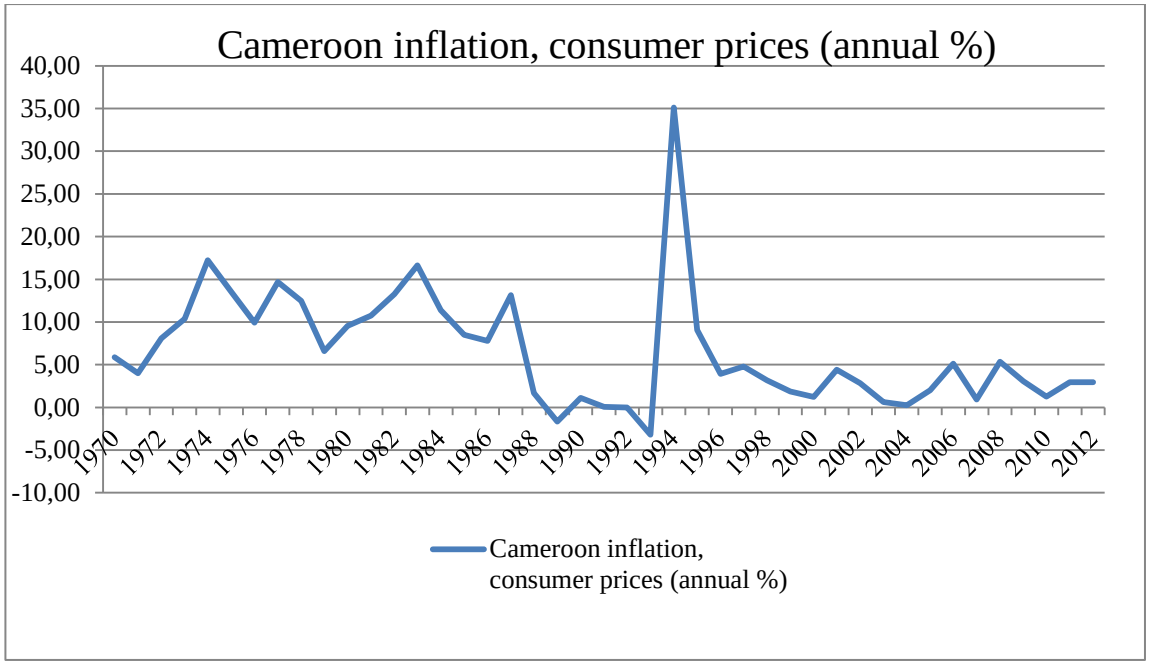

Figure 3. Cameroon's inflation from 1970 to 2012. ©World Bank Databank (2014)

3.4.2 Cameroon Employment

The survey by national institute of statistics (EESI 2, 2010), reveals that the informal sector (agriculture and non-agriculture) is the main provider of employment in Cameroon with approximately 90% of the total labor force (53% informal agriculture, 37% informal non-agriculture). Figure 4 presents the employment by sector and gender. The figure shows that the private sector represents less than 4% of the total labor force. This can be explained by the fact that majority of young people find their job in the informal sector (92 percent in 2010).

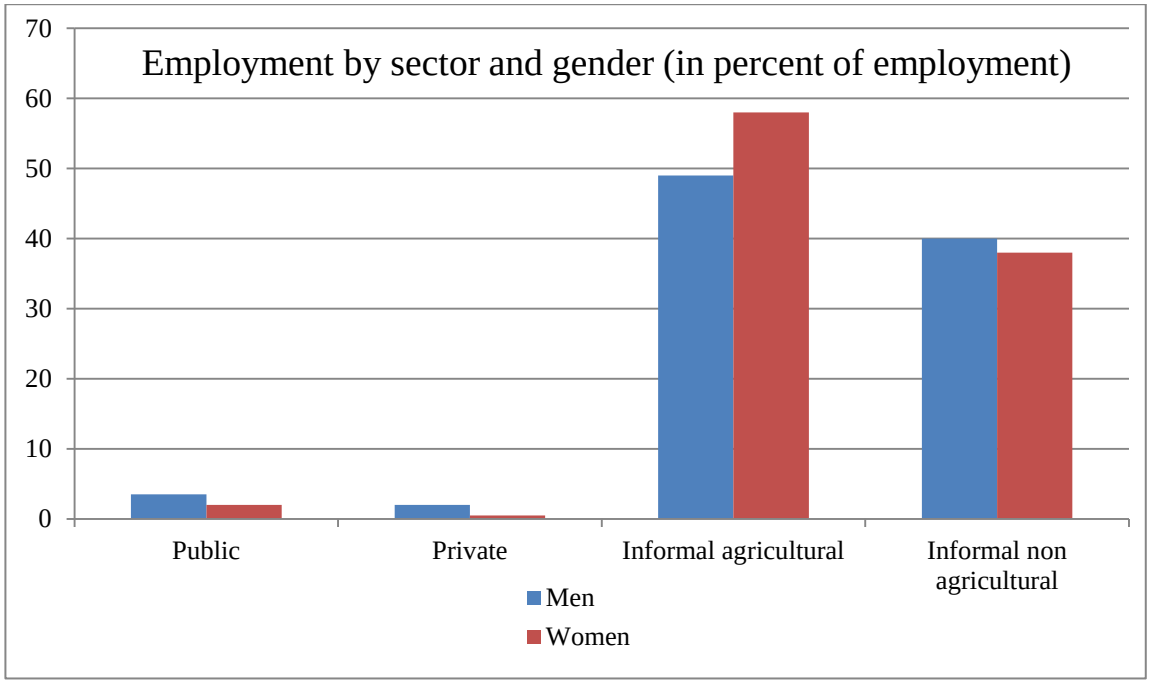

Figure 4. Employment by sector and gender (year 2010).
Source: National Institutes of Statistics EESI 2, 2010

The labor force participation rate has slightly increased during the last decade. In 2010, the International Labor Organization (ILO) estimates the labor participation rate at 70% compared to 68.9 in 2000. Conversely, the unemployment rate between 2000 and 2010 has decreased from 5.9% to 3.8 respectively.

In Cameroon, although unemployment is relatively low, underemployment concerns approximately 75% of the labor force (2012 estimates). However, it is worth recalling that, the average underemployed is a female living in a rural area with a low education level.

Chapter 4

DATA, MODEL AND METHODOLOGY

4.1 Data and Sources

The data used in this research work come from the World Development Indicators published by the World Bank, covering the period 1970-2012. The data format is time series consisting of four variables.

The dependent variable CAP refers to real GDP (Gross domestic product) measured as the value of the economic output adjusted for price changes. In this research, we have three explanatory variables: INV (gross fixed capital formation), measured as the net increase in physical assets during a fiscal year; FDI (Foreign direct investment) measured as the net inflow of investments made in Cameroon by foreign investors; LAB (Labor), measured as the total labor force aged between 15 to 65 years old. These data are used to measure the effects of FDI on economic growth in Cameroon. In this study, we attempt to capture how FDI impacts economic growth and welfare of people in Cameroon.

4.2 Model Specification

The main objective of this research being to capture the impacts of FDI on economic growth in Cameroon, we adopt the aggregate demand function (Y_t) based on the endogenous growth model which uses the Cobb Douglas production function and we

incorporate FDI and other relevant variables in the model. The aggregate production function of the economy is given as follow[1]:

$$Y_t = A_t K_t^{\alpha} L_t^{\beta} e^{\varepsilon t} \quad (1)$$

Where Y_t is the output of the economy, and represents real GDP at time t. At is the total factor productivity (TFP). It measures the efficiency of all inputs to the production process. K_t, and L_t are respectively the capital stock and the labor stock; e is a base of natural logs and εt is the disturbance term.

From the above equation, the impacts of FDI can be captured through the total factor productivity (A_t). Since the aim of this research is to capture the impacts of FDI on economic growth through changes in (A_t), it is assumed that (A_t) is a function of FDI and can be written as follow:

$$A_t = f(FDI_t) = FDI_t^{\delta} \quad (2)$$

By merging equations (1) and (2) together, yields:

$$Y_t = K_t^{\alpha} L_t^{\beta} FDI_t^{\delta} e^{\varepsilon t} \quad (3)$$

In this equation, α, β and δ represent the constant elasticity coefficients of outputs relative to K, L, and FDI. εt is the error term. The natural logs of equation (3) give the following equation:

$$LnY_t = \alpha LnK_t + \beta LnL_t + \delta LnFDI_t + \varepsilon_t \quad (4)$$

Equation (4) could be explicitly estimated as follows:

$$LnY_t = C + \alpha LnK_t + \beta LnL_t + \delta LnFDI_t + \varepsilon_t \quad (5)$$

From this equation, C is the constant term; ε_t is the error term and is assumed to be independent and normally distributed with zero mean and constant variance. All the variables are defined as previously.

[1] See also Fethi et al. (2013) for more detail about the model employed within this thesis.

In this research work, the capital stock is proxied by the share of investment to GDP which is necessary given the strong problems associated with attempts to measure the capital stock of developing countries like Cameroon. Moreover, the labor input is represented by the workforce.

The coefficients associated with variables K, and L are expected to be positively linked to the economy's real output (Y). Similarly, given the consensus which emerges from the existing literature and which relates FDI to economic growth, FDI are expected to have an optimistic influence on the level of output.

4.3 Methodology

In order to investigate the presence of a long-term stability (co-integration) among variables in the form of time series data, although numerous econometric methods have been proposed in particular that of Philips and Hansen (1990), and Johansen (1998), the ARDL is used to achieve the objectives of the present study.

Popularized by Pesaran and Shin (1995), and Pesaran et Al (2001), the ARDL approach to co-integration presents many advantages compared to other co-integration procedures. One of the main advantages is that irrespective of the point that the regressors are I(1) or I(0), ARDL can be applied. This approach therefore, makes it possible to bypass unit root tests at the outset of the empirical analysis.

Harris and Sollis (2003), argue that the ARDL approach to co-integration gives unbiased estimates of the long-term model. Furthermore, they claim that even when some of the regressors are endogenous, the T-statistics derived from this approach

are valid. In order to apply the ARDL approach to co-integration, equation (5) should be specified as a conditional ARDL-error correction model as follows:

$$\Delta Ln(Y)=\beta_0+\sum_{i=1}^{n}\beta_i\,\Delta Ln(Y)_{t-i}+\sum_{i=0}^{n}\mu_i\,\Delta Ln(INV)_{t-i}+\sum_{i=0}^{n}\phi_i\,\Delta Ln(LABOR)_{t-i}$$
$$+\sum_{i=0}^{n}\varphi_i\,\Delta Ln(FDI)_{t-i}+\theta_1 Ln(Y)_{t-1}+\theta_2 Ln(INV)_{t-1}+\theta_3 Ln(LABOR)_{t-1}$$
$$+\theta_4 Ln(FDI)_{t-1}+\varepsilon_t \qquad (6)$$

In this equation, β_0 is the drift component ε_t the error term, and 'n' the optimal lag length, ln(Y) is the natural log of real GDP, ln(INV) the natural log of gross fixed capital formation, ln(LABOR) the natural log of the workforce; ln(FDI) the natural log of foreign direct investment. Δ is the first difference operator. $\beta_i, \mu_i, \emptyset_i, \varphi_i$ in the model represent the short-term effects of variables, while θ_1 , θ_2 , θ_3 , θ_4 represent the long-term elasticities.

There are three stages in the ARDL approach to co-integration. The first stage consists of testing that co-integration is absent. In other words, in this stage, the null hypothesis is that the coefficients of lagged regressors in the ARDL error correction model are all equal to zero. This means that in the model, there is no long-term relationship between the variables. Null hypothesis is written as follows:

H_0: $\theta_1 = \theta_2 = \theta_3 = \theta_4 = 0$

This null hypothesis is tested against the alternative that:

H_1: $\theta_1 \neq \theta_2 \neq \theta_3 \neq \theta_4 \neq 0$

In this approach to co-integration, the F-statistic is used to find out whether or not it exists a co-integrating relationship among the variables. This is done independently of if the variables are I(0) or I(1).

In this research work, the critical values are given in Pesaran and Pesaran (1997) and Pesaran et Al (2001). The null hypothesis will be rejected in the case the F-statistic calculated exceeds the critical values indicating therefore the presence of co-integration between the variables. Conversely, the null hypothesis will not be rejected in the case F-statistic calculated is lower than the critical value. This indicates the absence of co-integration between the variables.

When there is a long-term relationship between the variables, the second stage of the ARDL consists of estimating the short-term and the long-term parameters. The estimates of the long-term ARDL are obtained only when a long-term relationship between the variables is confirmed. The third stage indicates the adjustment speed to long-term equilibrium following a short-term shock.

For this purpose, at the third stage, the error correction model is estimated. Taking into account equation (6), a general error correction model can be written as follows:

$$\Delta Ln(Y)=\beta_0+\sum_{i=1}^{p}\beta_i\,\Delta Ln(Y)_{t-i}+\sum_{i=0}^{p}\mu_i\,\Delta Ln(INV)_{t-i}+\sum_{i=0}^{p}\phi_i\,\Delta Ln(LABOR)_{t-i}$$
$$+\sum_{i=0}^{p}\varphi_i\,\Delta Ln(FDI)_{t-i}+\theta EZ_{t-1}+u_t \qquad (7)$$

From the above equation, θ is the adjustment speed parameter, EZ are the residuals derived from the estimation presented in equation (6). The diagnostic tests are carried out in order to determine the adequacy of the ARDL model. They are automatically derived by the software (Microfit 4.1) from the estimation of the model. The diagnostic tests are testing for the existence or not of serial correlation or autocorrelation, the functional form of the model, the normality and Heteroscedasticity associated with the model.

Chapter 5

DATA ANALYSIS AND RESULTS

5.1 Correlation of Variables

This section, first examines the degree of linear relationship between the variables. The data used are annual time series data from 1970 to 2012. In this study, four variables have been used. We used CAP, the dependent variable which refers to real GDP, and three explanatory variables: FDI (foreign direct investment), INV (gross fixed capital formation), and LABOR (total labor force). Table 3 shows the correlation coefficient of variables. It shows that the correlations relationship between the dependent variable and the explanatory variables are slightly high while that between the explanatory variables are very low. This follows the assumption of the classical linear model that no any explanatory variable has a perfect linear relationship with another explanatory variable.

Table 2: Correlation matrix of variables

	GDP	**INV**	**LABOR**	**FDI**
GDP	1.0000			
INV	.36692	1.0000		
LABOR	.39793	-.25486	1.0000	
FDI	.43207	.19561	.56250	1.0000

5.2 Unit Root Tests

Before conducting the ARDL bounds test, it is useful to check whether the variables are not second order stationary (meaning I (2)) which may lead to fallacious results. For this purpose, we test the stationarity of all the variables in the model to determine the order of integration for each variable.

This step is very important because based on the assumption that variables are either I(0) or I(1), Pesaran et Al (2001), provide calculated F-statistics not valid in the presence of I (2) variables (Ouattara, 2006). Therefore, in the ARDL procedure, the use of unit root tests is needed to check out that there is no integration of order 2 or beyond among the variables. Table 4 presents the stationarity results. It shows that the levels of integration of variables are either I(0) or I(1).

Table 3. Unit root tests

Variables	**(Test statistics and critical values)**				**Integration levels**
	Levels		**first difference**		
	ADF	**C.V. (5%)**	**ADF**	**C.V. (5%)**	
GDP	-1.5936	-2.9320	-3.2850	-2.9358	I(I)
INV	-2.6430	-2.9320	-4.7819	-2.9358	I(I)
LABOR	-11.3906	-2.9320	-15.6021	-2.9358	I(0)
FDI	-3.9337	-2.9320	-4.3562	-2.9378	I(0)

Since none of the variables is second order stationary, we can determine the existence or not of a long-term relationship between the variables by applying the co-integration test developed by Pesaran et Al (2001). Table 4 presents the co-

integration test results. Column (F) of the table provides the critical value bounds for F-statistic version of the test while column (W) provides the bounds for the W-statistic for the three cases based on whether the underlying regression contains an interceptor trend.

Table 4. F-Statistic

F-statistic variables	**F-statistic**	**Column F**		**Column W**	
		95%			
		I(0)	I(1)	I(0)	I(1)
F (GDP, INV, LABOR, FDI)	8.5199	2.85	4.05	14.2	20.24

It is worth recalling that the null hypothesis (no long-term relationship) is rejected when the calculated F-statistic is higher than the upper bound value and cannot be rejected if the F-statistic falls below the lower bound value. Furthermore, the result is inconclusive if the F-statistic falls in between the upper and lower bound values. From table 5, it is clearly shown that F-statistics exceeds the upper bound of critical values. It means we can reject the null hypothesis that there is no long-term relationship between the variables. Therefore, we conclude that it exists a long-term relationship between GDP and its related variables in the model.

The second step after providing the existence of a long-term relationship between the variables of the model consists in searching for the short-term and long-term coefficient estimates of the model.

For this purpose, the Schwarz Bayesian criterion (SBC) has been chosen because it is more parsimonious than the more popular Akaike Information criterion (AIC). The

long- and short-term estimates for the nexus between economic growth and its related variables are presented respectively in table 5 and table 6. In table 5, the summary statistics (R^2, and F-statistic) derived from the model leads to the conclusion that the selected ARDL shows a good performance.

In table 6, the error correction terms presented with a statistically significant value of -.12725 suggest that the divergence between the long-term equilibrium value and the actual value of GDP is totally corrected during one year at a rate of approximately 13%. Also, the results suggest that in the short term, investment, labor and FDI have a positive impact on economic growth.

In the long-term, the coefficient of FDI is significant at conventional level that FDI has an impact on economic growth in Cameroon whereas the investment and the labor force have a positive and significant impact on growth. This means that an increase in capital stock and labor force as well as FDI will bring a positive impact on growth.

Table 5. Autoregressive Distributives Lag estimates

Autoregressive Distributed Lag Estimates			
ARDL(1,0,0,1) selected based on Schwarz Bayesian Criterion			
Dependent variable is LGDP			
42 observations used for estimation from 1971 to 2012			
Regressor	Coefficient	Standard Error	T-Ratio[Prob]
LGDP(-1)	.87275	.038496	22.6711[.000]
LINV	.11731	.027008	4.3437[.000]
LFDI	.0061681	.0067004	.92056[.363]
LLABOR	.76765	.37426	2.0511[.047]
LLABOR(-1)	-.73465	.36777	-1.9976[.053]
**********			
R-Squared	.93630	R-Bar-Squared	.92941
S.E. of Regression	.045220	F-stat. F(4, 37)	135.9627[.000]
Mean of Dependent Variable	6.8351	S.D. of Dependent Variable	.17021
Residual Sum of Squares	.075660	Equation Log-likelihood	73.1072
Akaike Info. Criterion	68.1072	Schwarz Bayesian Criterion	63.7630
DW-statistic	1.3230	Durbin's h-statistic	2.2654[.023]

Note: the critical values are in parenthesis

Table 6. Error correction representation (estimation for short-term)

Error Correction Representation for the Selected ARDL Model			
ARDL(1,0,0,1) selected based on Schwarz Bayesian Criterion			
Dependent variable is dLGDP			
42 observations used for estimation from 1971 to 2012			
Regressor	Coefficient	Standard Error	T-Ratio[Prob]
dLINV	.11731	.027008	4.3437[.000]
dLFDI	.0061681	.0067004	.92056[.363]
dLLABOR	.76765	.37426	2.0511[.047]
ecm(-1)	-.12725	.038496	-3.3055[.002]
**********			
R-Squared	.41199	R-Bar-Squared	.34842
S.E. of Regression	.045220	F-stat. F(3, 38)	8.6414[.000]
Mean of Dependent Variable	.0081861	S.D. of Dependent Variable	.056021
Residual Sum of Squares	.075660	Equation Log-likelihood	73.1072
Akaike Info. Criterion	68.1072	Schwarz Bayesian Criterion	63.7630
DW-statistic	1.3230		

Chapter 6

CONCLUSION, SUGGESTIONS AND RECOMMENDATIONS

6.1 Conclusion

The main thrust of this thesis was to explore Foreign Direct Investment and its contributions towards economic growth and development in Cameroon. More specifically, this thesis aimed to test for the efficiency of external factor through its impacts on economic growth in Cameroon between the periods of 1970 to 2012 by employing the econometric method known as the Autoregressive distributed Lag (ARDL) for analyzing the growth model derived.

In order to explain the changes occurred in real GDP over the study period, the model retained two domestic factors (capital stock, and labor force), and one external factor Foreign Direct Investment (FDI) as independent variables. Recent analytical data techniques have been used to diagnose and check properties of time series data then, the model has been estimated to determine the long and short-term elasticities and their significance.

The empirical results points out that in the short and long-term, domestic capital stock and labor represent the driving forces for economic growth in Cameroon. In

addition, FDI was found to have a positive but insignificant impact on economic growth in both the long and short-term periods in the case of Cameroon.

Error-correction model has been used to support the existence of a stable long-term relationship and confirm a deviation from the long-term equilibrium following a short-term shock corrected by approximately 13 percent after each year.

I find that FDI, labor and gross fixed capital formation are positively associated with growth in Cameroon. The aim of this research work being to capture the impact of FDI on economic growth in Cameroon, I conclude that FDI inflows do not have any impact on economic growth in Cameroon. My results are of economic significance as they show that an increase in FDI as a share of GDP is associated with an almost unchanged level in annual GDP growth.

In this study, the positive correlation found between FDI and real GDP is consistent with the findings of others studies on FDI and growth. Many articles[2] in the relevant literature summarize the results obtained by some of these studies by presenting the countries involved, the sample period, the variables used and the main results.

6.2 Suggestions and Recommendations

Following the results obtained in this research work, the primary implication is that Cameroon leader are justified in enacting initiatives to attract FDI into the economy as FDI has had a positive impact on growth. The past being a good predictor of the future, it is conceivable that FDI will enhance economic growth in Cameroon in the years to come.

[2] See the table in appendix 2 to get more details about the relationship between FDI and real GDP.

As developing countries aim to meet the millennium goals and pull their populations out of poverty, Cameroon's policy makers should design and implement fiscal and monetary policy to enhance the country's attractiveness as a recipient country for FDI by making sure that these policies are acceptable to foreign investors. Success in attracting foreign capital inflows would accelerate the accumulation of the country's capital stock, thus setting the stage for the progressive structural transformation of the country's economy from a largely agriculture-based economy to a growing economy with expanding industrial and service sectors capable of absorbing the existing labor surplus and of reducing unemployment and poverty by improving the living standards of its people.

Several recommendations are offered. The first recommendation is that by attracting FDI, Cameroon leaders should ensure that it does not overshadow domestic small businesses. Ajayi (2008) argues that local businesses have closer contact with the customers and would generate faster economic growth than foreign investors.

The second recommendation is that Cameroon government should invest on education and improve available infrastructures. This would generate more skill to the workforce, increase the earnings of the labor, and therefore improve the purchasing power in Cameroon.

The third recommendation is that, the government should improve the business environment by eliminating bribery and corruption as well as the degree of underground economy that can discourage foreign investors and reduce the inflows of FDI.

REFERENCES

Acs Z, P. Braunerhjelm, D. Audretsch., & Carlsson, B. (2009). The Knowledge Spillover Theory of Entrepreneurship. *Small Business Economics*, 32, 15-30.

Aghion, A., & Howitt, P. (1992). Model of Growth through Creative Destruction. *Econometrica*, 60(2), 323-335.

Ahmed, E. (2008). Foreign Direct Investment Intensity Effects on TFP Intensity on ASEAN 5 PLUS 2. *Journal of Economic Development*, 33, 155-166.

Ajayi, S. L. (2008). Foreign Direct Investment in Sub-Saharan Africa: Origins, Targets, Impacts and Potential. African Economic Research Consortium.

Athukorala, P. W. (2003). The Impact of Foreign Direct Investment for Economic Growth: a Case Study of Sri Lanka. International Conference for Sri Lanka Studies.

Bamou, E., Bamou, T. L., & Tchanou, J. P. (2006). Trade and Investment Policy Reforms in Cameroon: Impact Assessment and Perspectives. *African Journal of Economic Policy*, 13(1), 120-150.

Blomstrom, M., Kokko, A., & Zejan, M. (1992). Host country competition and technology transfer by multinationals, working paper no. 4131 (NBER, Cambridge, MA).

Blomstrom., Magnus., Lipsey., Robert, E., & Zejan, M. (1996). Is fixed Investment the key to Economic Growth? *Quaterly Journal of Economics*, 111(1), 269-276.

Borensztein, E., De Gregorio, J., & Lee, J. W. (1998). How does foreign direct investment affect economic growth? *Journal of international Economics*, 45(1), 115-135.

Buthe, T., & Milner, H. V. (2008). The Politics of Foreign Direct Investment into the Developing Countries: Increasing FDI through International Trade Agreements?

Chenery, H., & Strout. (1996). Foreign Assistance and Economic Development. *American Economic Review*, 56(4), 6-19.

Chowdhury, A., & Mavrotas, G. (2005). FDI and Growth: A Causal Relationship. WIDER Research Paper 2005/25. Helsinki: UNU-WIDER.

Carkovic, M., & Levine, R. (2005). Does Foreign Direct Investment Accelerate Economic Growth? In T. H. Moran and E. M. Graham (Eds), *Does Foreign Investment Promote Development?* Washington, DC: World Bank.

David, B., & Nigel, D. (2007). Industrial Policy, FDI and Employment: Still Missing a Strategy. *Journal of Industry, Competition and Trade*, 7(3-4), 189- 211.

De Mello, L. R. (1999). Foreign Direct Investment-Led Growth: Evidence from Time series and Panel Data. *Oxford Economic Papers*, 51(1), 133–51.

De Mello, L. R. (1997). Foreign Direct Investment in Developing Countries and Growth: A Selective Survey. *Journal of Development Studies*, 34(1), 1–34.

Dunning, J. H., & Lundan, S. M. (2008). Multinational Enterprises and the Global Economy, 2nd Edition, Edward Elgar, Cheltenham.

Eden, L. (2009). Letter from the Editor-in-Chief: FDI Spillovers and Linkages. *Journal of International Business Studies*, 40(7), 1065-1069.

EIU (Economist Intelligence Unit) (2002). Country Profiles: Cameroon. London: EIU Ltd.

Fethi et al (2013). The Role of the Financial Sector in the Turkish Cypriot Economy: Evidence from Bounds and Causality Tests, 14(3), 540–563.

Felipe, J. (1997). Total Factor Productivity Growth in East Asia: A Critical Survey. EDRC Report Series, 65. Manila: Asian Development Bank.

Forgha, N. G. (2009). Foreign Direct Investment and Economic Performance in Cameroon. *International Review of Business Research*, 20(5), 55-69.

Francis, M. B. (2006). Growth, Redistribution and Poverty Changes in Cameroon: A Shapley Decomposition Analysis. *Journal of African Economies*, 15(4), 543-557, 559-560, 562-563, 565-570.

Gorg, H., & Greenaway, D. (2004). Much Ado about Nothing? Do Domestic Firms Really Benefit from Foreign Direct Investment? *World Bank Research Observer*, 19, 171–97.

Harris, R., & Sollis, R. (2003). *Applied Time Series Modelling and Forecasting*. Chichester: Wiley.

Hoang, T. T., Wiboonchutikula, P., & Tubtimtong, B. (2010). Does Foreign Direct Investment Promote Economic Growth in Vietnam? *ASEAN Economic Bulletin*, 27(3), 295.

Hoeffler, A. E. (2002). The Augmented Solow Model and the African Growth Debate. *Oxford Bulletin of Economics and Statistics*, 64(2), 135–58.

Johansen, S. (1988). Statistical Analysis of Co-integration Vectors. *Journal of Economic Dynamics & Control*, 12(June-September): 2131–54.

Johnson, A. (2010). Rethinking Bilateral Investment Treaties in Sub-Saharan Africa. *Emory Law Journal*, 59(4), 919-967.

Karim, N., & Ahmad, S. (2009). Foreign Direct Investment: Key to Poverty Reduction in Malaysia. *Journal of Applied Economics*, 8(5-6), 55-64.

Kumo, W. C. (2009). Foreign Direct Investment in Africa: Trends, Opportunities and Challenges.

Kemeny, T. (2010). Does Foreign Direct Investment Drive Technology Upgrading? *World Development*, 38(11), 1543.

Kasibhatla, K. M., Stewart, D. B., & Khojasteh, M. (2008). The Role of FDI in High Medium, Low Medium and Low Income Countries during 1970-2005: Empirical Tests and Evidence. *The Journal of Business and Economic Studies*, 14(2), 60.

Keegan, W. J., & Green, C. G. (2002). Global Marketing 3rd edition, Prentice Hall, New Jersey.

Kim, K., & Bang, H. (2008). The Impact of Foreign Direct Investment on Economic Growth: A Case Study of Ireland. KIEP Working Paper 08-04. Seoul: Korea Institute of International Economic Policy.

Lee, L. G., Baimukhamedova., & Akhmetova, S. (2009). The Effects of Foreign Direct Investment on Economic Growth of a Developing Country: From Kazakhstan. Allied Academies International Conference. Academy *for Economics and Economic Education Proceedings*, 12(2), 22-27.

Li, C. (2007). What Are Emerging Markets? Poster Presentation from the University of Iowa for International Finance and Development.

Mankiw, N. G. (2004). Principles of Economics, Thompson Mason.

MINEFI. (2006). Loi des Finances: Rapport Economique et Financier, Exercices, Yaoundé, Cameroun, 2006 uneca.org/TRID/…/Macro_24nov08/FDI and Export Njong 1.pdf.

Njong, A. M. (2008). Investigating the Effect of Foreign Direct Investment on Export Growth in Cameroon: Final Paper Submitted to UNECA for the 24-25 November, at Addis Ababa, Ethiopia.

OECD. (2002). Foreign Direct Investment for Development Maximising Benefits, Minimising Costs. Overview. Paris: OECD Publications.

Ofori-Brobbey, K. L., Ojode., & Woldie, M. (2010). Achieving Goal Congruence between the Objectives of Multinational Enterprises (MNEs) and Developing Countries (DCs). Journal *of International Management Studies*, 5(1), 138-146.

Ouattara, B. (2006). Aid, Debt and Fiscal Policies in Senegal. *Journal of International Development*, 18, 1105–22.

Ozturk, I. (2007). Foreign Direct Investment - Growth Nexus: A Review of the Recent Literature. *International Journal of Applied Econometrics and Quantitative Studies*, 4(2), 79-98.

Pesaran, H. M., & Pesaran, B. (1997). *Microfit 4.0.* Oxford: Oxford University Press.

Pesaran, H. M., & Shin, Y. (1995). 'An Autoregressive Distributed Lag Modelling Approach to Co-integration Analysis'. DAE Working Paper Series, 9514. Cambridge: Department of Applied Economics, University of Cambridge.

Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16, 289–326.

Phillips, P., & Hansen, B. (1990). Statistical Inference in Instrumental Variables Regression with I(1) Process. *Review of Economic Studies*. 57, 99–125.

Pitelis., Christos., & Roger Sugden (2000). *The nature of the transnational firm*. Routledge, 72.

Tang, S. E., Selvanathan, A., & Selvanathan, S. (2008). Foreign Direct Investment, Domestic Investment, and Economic Growth in China.

UNCTAD, World Investment Report, 2002, 2010.

United States Department of States. (2008). Investment Climate Statement—Cameroon Opens to Foreign Investment.

United States Department of States. (2009). "Investment Climate Statement—Cameroon Opens to Foreign Investment.

Wijeweera, A. R., Villiano., & Dollery, B. (2010). Economic Growth and FDI Inflows: A Stocch Frontier Analysis. *The Journal of Developing Areas*, 43(2), 143-158.

World Bank. (2003). *African Development Indicators 2003*. Washington, D.C.: The World Bank.

World Bank. (2014). *African Development Indicators 2014*. Washington, D.C.: The World Bank.

World Bank. (2015). *African Development Indicators 2014*. Washington, D.C.: The World Bank.

Zhang, K. (2006). Foreign Direct Investment and Economic Growth in China: A Panel Data Study for 1992-2004. Paper presented at the Conference of WTO, China and Asian Economies, University of International Business and Economics, 24-26 June. Beijing.

APPENDICES

Appendix 1: The global competitiveness index 2007-2008

Analysis of 12 pillars	Cameroon		Africa
	Rank out of (131)	Score (1-7)	Score (1-7)
2007-2008 global competitiveness index	116	3.91	3.52
Basic requirements	**…**	3.51	3.70
Institutions	118	3.10	3.71
Infrastructures	123	2.06	2.74
Macroeconomic stability	54	5.03	4.30
Health and primary education	118	3.85	4.07
Effectiveness factors	**…**	3.18	3.32
Higher education and training	113	2.84	2.98
Attractiveness of goods market	110	3.63	3.77
Attractiveness of labor market	108	3.87	3.91
Complexity of financial markets	125	3.16	3.68
Level of technology	101	2.56	2.63
Market size	87	3.00	2.87
Innovation factors	**…**	3.14	3.17
Complexity of business environment	112	2.99	3.47
innovation	105	3.29	2.87

Source: the global competitiveness report 2007-2008.

Appendix 2: Results of empirical studies on FDI and host countries economic growth.

Study	Country	Period	Variables	Impact of FDI on growth
Zhang, 2001	China	1984-1998	**GDP**, FDI, employment, Stock of domestic capital, total factor productivity	+
Kohpaiboon, 2003	Thailand	1970-1999	**GDP**, FDI, employment, capital stock, total factor productivity, stock of human capital	+
Akinlo, 2004	Nigeria	1970-2001	**Real GDP**, stock of foreign investment, private capital stock, human capital, active labor force, real government consumption, real export	+
Oladipo, 2007	Mexico	1970-2004	**Real GDP**, private capital stock, raw labor input, level of human capital, educational level, return to education relative to raw labor input, efficiency production, externality generated by additional stock of FDI	+
Xu and Wang, 2007	China	1980-1999	GDP, FDI, domestic investment, imports, exports	+
Vu, 2008	Vietnam	1990-2002	**Real GDP**, labor, physical capital, human capital, FDI stock	+
Baharumshah and Almasaied, 2009	Malaysia	1974-2004	**Growth of real GDP per capita**, initial income, human capital, domestic investment, FDI	+

Source: Adapted from Ozturk 2007.

Note: the dependent variable is written in bold.