

T.C.
İSTANBUL ÜNİVERSİTESİ
SOSYAL BİLİMLER ESTİTÜSÜ
İNGİLİZCE İKTİSAT ANABİLİ DALI

YÜKSEK LİSANS TEZİ

FOREIGN DIRECT INVESTMENT AND ECONOMIC
GROWTH: THE CASE OF TANZANIA

PASKAZI EUGENE AMANI
2504070012

TEZ DANISMANI
PROF. DR. NİHAL TUNCER

Bu çalışma, İstanbul Üniversitesi Bilimsel Araştırma Projeleri Birimi tarafından desteklenmiştir. Proje No: 3054

İSTANBUL, 2009

TEZ ONAYI

..... Anabilim- Bilim Dalında
Numaralı’ın hazırladığı
“.....” konulu **YÜKSEK LİSANS / DOKTORA**
TEZİ ile ilgili **TEZ SAVUNMA SINAVI**, Lisansüstü Öğretim Yönetmeliği’nin 15.Maddesi
uyarınca, günü saat/.....’de yapılmış, sorulan
sorulara alınan cevaplar sonunda adayın tezinin’ne* **OYBİRLİĞİ**
/OYÇOKLUĞUYLA karar verilmiştir.

JÜRİ ÜYESİ	KANAATİ (2)	İMZA

ÖZET

Foreign Direct Investment and Economic Growth: The Case of Tanzania, Paskazi Eugene Amani.

Afrika'daki gelişmekte olan ülkeler, özellikle de Tanzanya, doğrudan yabancı yatırımları (DYY) ekonomik gelişmeyi, modernizasyonu, gelir artışı, istihdamı ve yoksulluğu ortadan kaldıracı bir kaynak olduğunu gittikçe kavıyorlar. Sürekli gözden geçirilen ve düzenlenen ekonomi politikaları bunu yansıtmaktadır. Bu reformlar açıkça, ülkeye daha çok DYY çekmek ve milli ekonomide mevcut olan DYY'lerin yararları maksimize edebilmek için yapılmaktadır. 1980 yılların ortasından bu yana, Tanzanya hükümeti, ekonomisini geliştirebilmek ve böylelikle yoksulluğu azaltabilmek amacıyla daha çok DYY'yi çekmek için ekonomi politikalarında daha liberal olmuştur.

Bu çalışmanın amacı, DYY'nin ekonomiye ciddi bir etki sağlayıp sağlamadığının farkına varmaktır. Bu çalışmada uygulanan metodoloji, doğrudan yabancı yatırımların büyüme üzerindeki etkisini analiz etmek üzere Tanzanyadan derlenen 1970-2007 dönemine ait zaman serisini içeren artan içsel büyüme modelini içermektedir. Yapılan bu analizeye bağlı olarak, DYY'nin, teknolojik, yenilik ve bilgi yayılma etkisi aracılığı ile Tanzanya ekonomik büyümesi üzerinde pozitif etkiye sahip olduğunu sonuca varılmıştır.

Anahtar Kelimeri: Doğrudan yabancı yatırım, Ekonomi büyüme, İçsel büyüme modeli.

ABSTRACT

Foreign Direct Investment and Economic Growth: The Case of Tanzania, Paskazi Eugene Amani.

Developing countries in Africa, Tanzania in particular, are increasingly recognizing foreign direct investment (FDI) as a source of economic development, modernization, income growth, employment as well as poverty eradication. This is reflected by the currently pursued economic policy reforms. The reforms are explicitly intended to improve conditions to attract FDI and to maximize the benefits of the presence of FDI in the domestic economy. The government of Tanzania has since the mid of 1980s become more liberal in its economic policies to attract more FDI so as to increase its economic growth and hence alleviating poverty in the country.

The aim of this study is to discover whether FDI has been a crucial role in determining economic growth or otherwise. The methodology involved estimating augmented Endogenous Growth Model using time series data for the period 1970-2007 collected from Tanzania to analyze the effects of FDI net inflows on growth. Based on the analysis carried out, it was concluded that FDI net inflows has positive effects on economic growth mainly through technological innovation and knowledge spillover effects on the economy of Tanzania.

Key Words: Foreign direct investment, Economic growth, Endogenous growth model.

ACKNOWLEDGMENT

This research project would not have been possible without the support of many people. I wish to express my gratitude to my supervisor and head of Department of English Economics, Prof. Dr. Nihal Tuncer who was abundantly helpful and offered invaluable assistance, support and guidance.

Deepest gratitude is also due to Asst. Prof. Dr. Osman Çetinkaya without whose knowledge and assistance this study would not have been successful.

Special thanks to Asst. Prof. Dr. Türkan Turan for sharing the literature and invaluable assistance.

Not forgetting my best friends who have always been there and all members and staff of English Economics department.

I also wish to express my love and gratitude to my beloved families; for their understanding and endless love, through the duration of this study.

PREFACE

Mobilizing financial resources for economic growth and development has been central concern to the development strategies of developing countries. The past two decades have seen a greater reliance on FDI as a source of financial and it is argued to have important implications for a host country's balance of payments, saving investment, export-import balance and overall macroeconomic activities. It is also seen as a principal channel for the transfer of technology to developing countries and enhancement of production and export capacities as well as a boost to economic growth.

However it depends on a host country's factors such as quality and type of FDI, conducive environment for investments which includes FDI policies and procedures, infrastructure facilities, economy growth prospects, macroeconomic policies and political stability. In this context, FDI presents a policy challenge for developing countries. It calls for accountability, transparency and efficiency in the corporate investment climate and also for the government to ensure that FDI contributes to economic growth and development through ensuring that FDI inflows stimulate local industry development.

This work attempts to analyze effects of the of FDI net inflows on the Tanzanian economic growth. We used time series data and endogenous growth models in our analysis. The statistical package program E-views is used in this work to generate econometrical results. The analysis is also extended to the measures the government of Tanzania has taken to restructure its economic policies in order to open its doors into the international markets and attract more FDI.

PASKAZI EUGENE AMANI
ISTANBUL, 2009

TABLE OF CONTENTS

ÖZET.....	iii
ABSTRACT.....	iv
ACKNOWLEDGEMENT.....	v
PREFACE.....	vi
TABLE OF CONTENTS.....	vii
LIST OF FIGURES.....	ix
LIST OF TABLES.....	x
LIST OF ABBREVIATIONS.....	xi
1. INTRODUCTION.....	01
2. HISTORY, ECONOMIC GROWTH AND THE DEVELOPMENT EXPERIENCE OF TANZANIA.....	06
2.1 The Short History of Tanzania.....	06
2.2 Economic Growth and Development Experience.....	08
2.3 Comparison of Tanzania with other Similar Economies: World Bank Classification.....	13
2.4 Economic Performance During 1990-2007.....	16
2.4.1 Government Policies, Openness and Trade.....	17
2.4.2 Economic Growth and Productivity Trends.....	20
2.4.3 Reforms on the Sector of Education	25
3. FOREIGN DIRECT INVESTMENTS IN TANZANIA.....	27
3.1 Definitions and Foreign Direct Investment in Tanzania.....	27
3.2 Foreign Direct Investment in Tanzania.....	28
3.3 Distribution of FDI in Tanzania.....	31
3.3.1 Sectoral Distribution of FDI Inflows.....	32
3.3.2 Regional Distribution of FDI Inflows.....	38
3.3.3 FDI Distribution by Regional Groupings and Country of Origin.....	40
3.4 FDI Performance and its Implications.....	42
3.5 FDI Promotion and Tanzania's Economic Growth.....	49

3.5.1	International Investment Agreements in Eastern Africa.....	52
4.	MODELING FDI AND ECONOMIC GROWTH OF TANZANIA.....	55
4.1	The Balasubramanyam Model.....	55
4.1.1	Capital Formation and Technology Transfer.....	56
4.2	Empirical Model and Estimations.....	59
4.2.1	Empirical Estimations of FDI Inflows.....	60
4.2.2	Empirical Estimations of GDP Growth.....	63
5.	CONCLUSIONS	67
	REFFERNCES.....	69
	APPENDICES.....	74

LIST OF FIGURES	PAGE
Figure 4.1: Actual, fitted and residuals of the regression for FDI	61
Figure 4.2: Actual, fitted and residuals of the regression for GDP	64

LIST OF TABLES	PAGE
Table 2.1: Policies Performance in some Selected Indicators	11
Table 2.2: World Bank Classification of Economies	15
Table 2.3: Tanzania Real Growth and Inflation 1990 – 2003	17
Table 2.4: Imports and Exports	19
Table 2.5: Production of selected manufacturing commodities	22
Table 2.6: The Production and Exports of some Selected Crops	24
Table 3.1: Sectoral Distribution of FDI Inflows in Tanzania	33
Table 3.2: Regional Distribution of FDI Inflows	39
Table 3.3: FDI Stocks in Tanzania by Country of Origin	40
Table 3.4: Contribution of Some of the Privatized Firms to the Tax Revenue	47
Table 3.5: Bilateral Investment Treaties and Double Taxation Treaties	52
Table 4.1: Regression Variables	58
Table 4.2: Unrestricted Cointegration Rank Test (Trace Statistics) for FDI	60
Table 4.3: Time Series Regression Analysis for the Determinants of the stock of FDI inflow	63
Table 4.4: Unrestricted Cointegration Rank Test (Trace Statistics) for GDP	65
Table 4.5: Time Series Regression Analysis of Determinant of GDP Growth	66

LIST OF ABBREVIATIONS

AA	Aluminum Africa
AGMC	Ashanti Gold Mining Company
BIT	Bilateral Investment Treaties
BOT	Bank of Tanzania
BP	British Petroleum
CMB	Carnaud Metal Box
COMESA	Common Market for Eastern and Southern Africa
CRDB	Cooperatives Rural and Development Bank
DTT	Double Taxation Treaties
DRC	Democratic Republic of Congo
EAC	East African Community
EDS	Export Development Strategy
EP	Export Promotion
EPZ	Export Economic Zone
FDI	Foreign Direct Investment
GFCF	Gross Fixed Capital Formation
GGM	Geita Gold Mine
ICT	Information Communication and Technology
IPC	Investment Promotion Center
IS	Import Substitution
IT	Information Technology
KMCL	Kahama Mining Corporation Limited
LDC	Less Developed Countries
NACSAP	National Anti- Corruption Strategy and Action Plans
NBC	National Bank of Commerce
NBS	National Bureau of Statistics
NTB	Non Tariff Barriers

PCA	Public Corporations Act
PCB	Prevention of Corruption Bureau
PE	Primary Education
PHDR	Poverty and Human development Report
PWT	Penn World Table
SADC	Southern African Development Community
SOE	State Owned Enterprises
RES	Royal Economic Society
R&D	Research and Development
SDN	Sustainable Development Network
SEZ	Special Economic Zone
SOE	State Owned Enterprises
TCB	Tanzania Coffee Board
TCC	Tanzania Cigarette Company
TFP	Total Factor Productivity
THA	Tanzania Harbor Authority
TIPER	Tanzania – Italia Petroleum Refinery Company Ltd
TMCB	Tanzania Marketing Cotton Board
TNC	Transnational Corporations
TPC	Tanzania Portland Cement
TSB	Tanzania Sisal Board
UNCTAD	United Nations Conference on Trade and Development
URT	United Republic of Tanzania
USSR	Union of Soviet Socialist Republics
WB	World Bank
WBA	World Bank Atlas
WAHSA	Work and Health in Southern Africa

1 Introduction

Foreign direct investment (FDI) is often seen as an important catalyst for economic growth in developing countries. It is argued to be an important vehicle of technology transfer from developed countries to developing countries. FDI can also stimulate domestic investments and facilitate improvements in human capital and institutions in the host countries. Past studies show that FDI has a positive impact on economic growth; however the size of such impact may significantly vary across countries depending on the level of human capital, domestic investment, infrastructure, macroeconomic stability and trade policies.

Tanzania has long been striving to attract FDI. The government has been applying different strategies and made efforts in order to attain the goal of fully attracting FDI to the country. Some of the strategies applied so far include policy reforms and advertisements. The question that arises here is that, have these efforts generated any significant change to the economy? The aim of this study is to address this question. We analyze the effects of FDI on economic growth of Tanzania. In connection to the previous researches on the relationship and economic growth in developing countries, it is argued in this dissertation that FDI inflows result in better performance in economic growth of Tanzania.

Studies based on the neoclassical economic growth approach argue that FDI affects only the level of income in the short run and in the long-run the level of growth remains constant. It is argued that the level of economic growth in the long-run can only arise because of technological progress and/or population growth, both considered exogenous. Thus, according to neoclassical or the Solow Swan economic growth models, FDI will only impact growth if it brings about positive and permanent technological change.

More recent endogenous growth models, on the other hand, imply that FDI can affect growth endogenously if it generates increasing returns in production via externalities and spillover effects. The principals of endogenous economic growth model is that; firstly it allows both international firms and domestic sources to encourage investments in human capital and secondly; it allows the allocation of resources on the basis of comparative advantage and free markets also promote specialization and scale economies. Externalities, human capital and learning by doing are argued to be the pillars (the growth promoting factors) of endogenous growth theory. In the endogenous growth models, FDI is considered to be an important source of human capital and technological diffusion. FDI introduces new management practices and organizational arrangements as well as providing labor training in the host country production facilities. FDI encourages the incorporation of new inputs and technologies in the production systems of host countries.

In the context of endogenous economic growth theory Balasubramanyam et al. analyzed the relationship between trade strategy, FDI and economic growth in developing countries¹. Using cross section data from forty six countries their analysis based on import substitution and export promoting criteria. It is argued that EP induced FDI is more likely to be more efficient in promoting economic growth because it is allowed to operate in a free market economy. They added that induced IS would not be efficient as EP because it would be limited by the characteristics of the host county's market policies. In addition the growth promoting factors identified by the new economic growth theory can be used to promote growth through FDI. As a result FDI has acted as a significant bridge to transfer technology to developing countries.

¹ V. N. Balasubramanyam, M. Salisu, David Sapsford, "Foreign Direct Investment and Growth in EP and IS countries", *The Economic Journal*, Vol., 106, No., 434, Blackwell Publishing for the Royal Economic Society, 1996, pp: 94-95

FDI is argued to have the ability to transfer not only technology but also production know how and managerial skills to the destination countries. However, past experience shows that externalities are major benefits flowing to developing countries from FDI. Investments in the form of FDI also lead to the exportation of skill intensive goods from developed to developing countries while less skilled goods are exported from developing to developed countries. As a result the gap in skills is bridged through FDI. In addition FDI is used to transfer knowledge created in developed to developing countries. Even though the knowledge transferred to developing countries is aimed at the foreign firms undertaking the investments, it could spill-over to the domestic firms through training of labor and through links between foreign firms and locals suppliers of intermediate goods. Domestic firms can also learn by watching.

Balasubramanyam et al. added that the presence of foreign firms in the host economy with their superior technology may drive domestic firms to invest in learning only in the name of keeping the competition. In turn the extended competition from domestic firms through their investment may drive foreign firms to bring in more superior quality technology and know-how. As a result the performance of economic growth is increased.

They continued to argued that endogenous growth theories provide a powerful support that FDI could be a potential factor in promoting economic growth. FDI may lead to competition and generate investments in both learning and human capital formation by both foreign and domestic firms. However, the utilization of this potential requires a conducive economic climate. In the absence of such climate, FDI may be counter productive; it may prevent rather than support economic growth. It may serve to enhance the private rate of return to investment by foreign firms while exerting little impact on the social rate of return to investments in the host country.

William Easterly and Rose Levine² are other researchers in the area of economic growth. In their work, what we have learned from a decade of empirical research on economic growth, they analyzed five stylized facts namely;

- i. It is not factor accumulation, it is total factor productivity (TFP)
- ii. Divergence not convergence
- iii. Growth is not persistent but factor accumulation
- iv. When it rains it pours, all factors flow in the same direction
- v. Policy matters

They argued in stylized five that national policies play an important role on economic growth. However the empirical literature on national policies and economic growth is huge and it is unclear which national policies are most strongly linked with economic growth. Some researchers focus on openness to international trade, some on fiscal policy, some on financial development and other macroeconomic policies. They added that all these indicators have at least one feature in common. They all concluded that some indicator of national policy is strongly linked to the economic growth.

They analyzed the relationship between the components of national policies and economic growth. Income per capita, average years of schooling, openness to trade, inflation, government size and private credit indicators were initially used to test the link between government policies and economic growth. They concluded their analysis that government policies are strongly linked to economic growth performance.

In order to address the question of whether FDI net inflows result in better performance on economic growth of Tanzania. This analysis relies on the work of Balasubramanya et al. to describe the effects of FDI and economic growth. A literature

² William Easterly, Rose Levine, “What have we learned from a decade of empirical research on growth? It is Factor Accumulation: Stylized Facts and Growth Models”, World Bank Economic Review, Vol., 15 No., 2, 200, pp: 181-208

preview above will provide the guidance to this analysis. Their econometric analysis and growth models will also be used as guidance to test and finally present the results.

As stated earlier the government of Tanzania has undergone major policy reforms. As result this paper also draws from W. Easterly and R. Levine to address reforms made in order to improve the performance of economic growth. We will observe the role of these reforms in the attraction of FDI to the country. This dissertation is organized as follows.

Chapter two of this dissertation presents short history of Tanzania and the economic growth and social development experience of Tanzania. The World Bank classification of economies aimed at presenting the position Tanzania holds is tabled. Economic performance and the on going transition period of policy reforms as well as effects of these reforms on economic growth are discussed in this chapter. Finally, economic growth and productivity trends of Tanzania are presented.

Chapter three presents foreign direct investments in Tanzania. The discussion of FDI is extended into sectoral and regional distributions. However FDI performance and its implications are detailed in this chapter. Using data from 1970 to 2007, the economic growth model is presented in chapter four and the results show that FDI net inflows is positively correlated to economic growth. This concludes the hypothesis that FDI is important and can promote economic growth of Tanzania.

2 History, Economic Growth and Development Experience of Tanzania

2.1 The Short History of Tanzania

The recorded history of Tanzania began in the mid 1880s when German Traders invaded the country. Prior the German traders invasion, Tanganyika (the name used before the union of Tanganyika and Zanzibar to form Tanzania), was criss-crossed trade routes linking the great lakes (Tanganyika and Victoria) with the coast of Indian Ocean. These trade routes were routes used by Arab traders to move subsequently inland searching for slaves and ivory.

The coming of the German Trader Carl Peters in 1885 to Zanzibar and later to Tanganyika began the new era for the country with some parts fully becoming the German Colony in the year 1886. Reaching the year 1891 the country was fully under German authority and acquired the name East Africa German Colony. There followed two decades in which German authority made considerable efforts to develop their East African German Colony. However this energetic German presence was resented by African tribes particularly when the harsh methods of forced labor were applied in the cultivation of cash crops (mainly sisal, cotton and coffee). As a result, in the year 1905 tribes in the central of Tanganyika began to fight against the German harsh methods which lead to the rise of popular rebellion well known as Maji-Maji war. The Germans won the war through the use of guns and well trained forces hence managed to retain the East Africa German colony until the break of the First World War in 1914.

After the First World War the treaty was signed in Versailles France in the year 1919, as a result the German authority lost the right to govern the East African territory. The treaty granted Britain to govern the former German East Africa which then acquired the new name Tanganyika. British policy from the 1920s onwards continued to encourage indigenous African administration along traditional lines, through local

councils and courts. A legislative council was also established in Dar es Salaam, but African members were not elected to this until after the Second World War. By then local political development was an obligation under the terms of UN trusteeship, in which Britain placed Tanganyika in 1947. Since then the Tanganyika people began to form political parties and reorganizing themselves until it acquire its independence in 1961. After the independence two transitional years passed and in the year 1964, the first president of Tanganyika the late Julius Nyerere and the president of the offshore islands of Zanzibar the late Aman Abeid Karume signed an act to bring the two Nations together as the United Republic of Tanzania.

United Republic of Tanzania under the late Julius Nyerere who became the first president of the new nation, was an idealist socialist. He guided the country along lines of socialism policies while emphasizing local self sufficient as means of achieving national unity and reach development goals. Traditional and simple solutions were sought for local problems rather than relying on technological foreign imports. Great importance was placed on education and literacy, in which excellent results were achieved through providing free education. In the year 1967 through Arusha Declaration Tanzania was declared a socialist state which was accompanied by the nationalization of key elements (including private owned firms) in the economy. The declaration placed agriculture at the center of the national economy and introduced programs that were aimed at moving peasants and farmers into cooperative villages where they could work together more productively.

Socialism policies did not last long. By the late 1970s the economic system had shown all signs of failure to address the development strategies. The failures of socialism policies in early 1980s lead the government to seek for adjustment both in economic and social developments. These adjustments effectively began in the mid of 1980s with the first President stepping down in 1985. Economic and social development policies reform continued and by the end of 1990s while emphasizing more domestic

and foreign direct investments as well as privatization of the state owned firms; the government managed to attract many investors especially in the mining, tourism and manufacturing sectors as domestic investments increased subsequently. In the early 2000s almost all of the state owned firms were privatized and the economy key sectors (mining, manufacturing, tourism, construction and agriculture) were growing at an appealing rate.

2.2 Economic Growth and Development Experience

The economic history of Tanzania began in 1967 with the Arusha Declaration when Tanzania was announced a socialist nation. This was the beginning of implementation and realization of policies that would favor self-reliance, equal political, economic, social, and civil rights for all people. Such policies favored the economic system of that time, which was USSR and China style of central planning and import substituting industrialization. Such policies were accompanied by implacable government oppositions to any capitalist practices in the nation's development; as a result free market economy incentives which are argued to be the means of improving technological growth were banned.

Tanzania has gone through three phases of economic growth namely; the post independency, 1961 to 1967, post Arusha declaration 1967 to the mid of 1980s and the free market economy era. It is argued that the second was a self establishment phase after independence. It was planned and intended to strength the international trade and relations; however the introduction of socialism policies failed to introduce and engage the country into international market economy. As a result the economic failed and growth remained stagnant.

Researches argue that international trade and financial integration (openness) promote growth; however it depends on the country's trade and economic policies. This

is where the third phase falls, the free market economy which began with the reform of policies in the mid of 1980s in order to revive the economy.

Due to the failure of socialism policies in the early 1980s, significant measures to revive the economy were vital in order to liberalize the economy of Tanzania along market lines and encourage both domestic private and foreign investment. Over the past two decades Tanzania has undergone major changes in improving its economic development and performance. Beginning in the year 1986, the government of Tanzania introduced an adjustment program to end central controlled economic system and encouraged free market system and more active participation of the private sector in the economy. The reform program included a comprehensive package of policies which were intended to reduce the budget deficit and improved monetary control, basically depreciated the overvalued exchange rate, liberalized the trade regime, removed price controls and initiated a reconstructing of the financial sector.

Several measures have been taken and policies reformed, aimed at promoting domestic investments and attract more foreign investments in order to increase economic growth performance. The government of Tanzania has taken significant measures to attract investors and promote private and public sector. But despite of all the efforts that have been made there have not been major impacts attracting investors especially in the manufacturing and agricultural sectors. Investors are generally concerned with potential market and labor. Newly formed East Africa Community has over one hundred million population but with less potential buyers which makes it difficult to attract investors to the region. However, Tanzania has succeeded to attract a number of investor in the mining, tourism and construction sectors with construction being under private domestic firms.

Major efforts have also been taken to boost investments including the establishment of Special and Export Economic Zones. This is a significant step towards reaching the strong economic growth. The government is putting in more effort to

ensure that Tanzania becomes the major destination for investors and a significant pass way for surrounding land locked neighbour countries. Along with Export Economic Zones the government also established Special Economic Zones which are intended to attract and promote investment for export led-industrialization in order to increase foreign exchange earnings; to create and increase employment opportunities; to attract, encourage and transfer of new technologies; as well as promote processing of local raw materials for export³. EPZs are secured territory to the company operating in the zone where a special tax regime and other conditions are applied to boost exports. In the Eastern African region it is Tanzania and Kenya provide both relief of transaction Taxes and income tax relief. The objective of these tax relieves is to minimize the burden and boost exports in order to increase national income and promote growth.

The reforms were also extended to the financial sector and have resulted into significant increase in the number of financial institutions and improvement in the efficiency and quality of financial services provision⁴. This has resulted into the creation of new environment under which financial institutions operate. As a result FDI inflows to this sector have rapidly increased. Since early 1990s the financial sector grew almost to 5 from 2 percent annually in real terms. These developments reflect partly the liberalization of interest rates and the approval of the Banking and Financial Institutions Act, which laid the ground for the establishment of private financial institutions and clarified the responsibility of the Bank of Tanzania for the licensing, regulating, and supervising of banks and nonbank financial institutions. The effectiveness of financial

³ L. B. Mlingi, Florian M. Kessey, "Inventory of Free Trade (Export Processing Zone) in Tanzania, Tanzanian Occupational Health Services, Basis for Future Interventions", WAHSA Project 3.7.1, Tanzania Occupational Health Services, 2006, p:5

⁴ "Tanzania Investment Report", ([http://www.tic.co.tz/TICWebSite.nsf/0/347185b7256c14ee432572d500370944/\\$FILE/Tanzania_Investment_Report_2004.pdf](http://www.tic.co.tz/TICWebSite.nsf/0/347185b7256c14ee432572d500370944/$FILE/Tanzania_Investment_Report_2004.pdf)), 21 June, 2009, BOT, NBS and TIC, 2004, p: 6

sector reform has been reflected in substantial increase in credit to the private sector of which I will not go into details because it's beyond the boundaries of this dissertation.

Table 2.1, Policies Performance in some Selected Indicators

Year	GDP Growth (%)	GNI per capita, PPP (Current International US \$)	FDI Net Inflow(Million \$)	Mortality rate, under-5 (per 1,000)
1990	7.00	590	6.40	157
1991	5.20	610	8.00	157
1992	5.40	610	12.17	155
1993	6.10	610	20.46	154
1994	6.40	610	50.00	154
1995	3.60	640	119.94	154
1996	4.50	660	150.07	152
1997	3.50	680	157.89	151
1998	3.70	700	172.31	145
1999	3.50	720	516.70	145
2000	5.10	750	463.30	143
2001	6.20	800	388.80	139
2002	7.20	850	387.60	132
2003	5.70	890	308.20	129
2004	6.70	950	330.60	127
2005	6.80	1040	494.05	125
2006	6.70	1120	596.95	119
2007	7.13	1200	646.97	116

Source: Data from BOT, TIC and WB

Literature argues that economic growth has increased noticeably, as a result of economic policy reforms through the pursuing ambitious programs, supported by substantial donor aids. Table 2.1 above reveals the growth performance, GDP growth and GNI per capita kept rising as well as FDI inflows. Child mortality rate is still high which reveals that still much has to be done to reflect this policy performance in the health sector.

Since the mid of the 1990s, the government of Tanzania based on the following pillars in the economic and social development policies reform;

- Large-scale privatization. Virtually all state owned enterprises have been privatized.
- Liberalization. The State has increasingly been withdrawn from the domination of economic activities and in turn has been liberalizing current account transactions, the exchange market, agricultural prices and marketing boards, for instance Tanzania Marketing Cotton Board (TMCB), Coffee Board (TCB) and Tanzania Sisal Board (TSB).
- Macroeconomic stabilization. Tight monetary and fiscal policies have resulted in a rapid decline of inflation rates to significantly low rates.

Macroeconomic stabilization and debt sustainability is argued to be reached. However the household budget survey⁵ shows that together with the macroeconomic stabilization progress, there is only a moderate decline in aggregate poverty over the past ten years. Such results trigger the question that is this positive macroeconomic performance has had any crucial effects on the efforts to reduce poverty?

To address the above question let us review the main features of economic performance since 1995 with a view to assessing the impact of reform-oriented policies, the patterns of the sources of growth and growth prospects. It is assumed that economic policy reforms had substantial and positive effects on growth and enhanced the contribution of total factor productivity (TFP). The failure of the positive macroeconomic performance to have positive effects on the efforts towards poverty reduction can be due to the failure to manage newly formed policies. In addition

⁵ “Household Budget Survey, Income Poverty and Inequality”, National Bureau of Statistics (NBS) Tanzania (http://www.nbs.go.tz/HBS/Main_Report2007.htm), 23 March, 2009, 2007, p:2

reformed policies did not state much about the steps to be taken towards poverty eradication. Reforms in the financial, imports and exports sectors also led to the reduction of Taxes collected due to tax holidays and exemptions. The amount of taxes lost would have been used for social development projects.

However, we argue that the continuation of these reforms will allow the economy of Tanzania to grow by 7.5% percent annually over the next ten years⁶. This can be observed from the growth of the past seven years which is 6.44% on average compared to the growth of 4.66 during 1990 and 1999. The economic growth stood at 7.13% in the year 2007. Therefore, the continuation of recent observed economic growth in urban areas and a slightly acceleration in rural areas should allow Tanzania to achieve its objectives for reducing income poverty in line with achieving millennium development goals (MDGs).

2.3 Comparison of Tanzania with other Similar Economies: World Bank Classification

Tanzania is facing many challenges especially in the area of income poverty reduction. According to Global Economic Prospectus⁷, the classification of economies by Income and region Tanzania is under the low income group of countries. The countries in the low income group are considered to have large percent of population living under one US dollar per day. The classification report shows that most of the low

⁶ This will of course depend on the performance of implementation of the reformed policies and economic shocks. We have observed oil crisis in the year 2007 when prices went up high up 157 US dollars per barrel, as a result price of petrol went up to TShs 2000 per litre from TShs 1250. As that was not enough, the economies under went global financial and economic crisis, all these economic cycles deter the efforts in implementation of economic reform policies

⁷ “Classification of Economies by Income and Region”, Global Economic Prospectus, WB (<http://siteresources.worldbank.org/INTRGEP2004/Resources/classification.pdf>), 17 April, 2009, 2003, p: 296

income countries are lying in the Sub Saharan Africa where Tanzania belongs. Table 2.2 below classifies all World Bank member economies and all other economies with populations of more than 30,000. Economies are divided among income groups according to 2001 GNI per capita, calculated using the World Bank Atlas method. The groups are; low income, \$745 or less; lower middle income, \$746 to \$2,975; upper middle income, \$2,976 to \$9,205; and high income, \$9,206 or more. It should be noted that table 2.2 presents low income group only.

The neighbour countries of Tanzania are Kenya, Uganda, Democratic Republic of Congo (DRC), Rwanda, Burundi, Malawi, Mozambique and Zambia. As it can be observed from the world classification table all these countries fall in the same category of low income countries. Even though efforts are being made to broaden the range of market forces in these surrounding countries, they all fall in different economic groups which have different priorities. Tanzania, Kenya, Uganda, DRC, Burundi and Rwanda form the East African Community (EAC), while some fall in the COMESA and some fall in one of the above group and SADC. These development groups can enhance the economic condition of the region if common market is created and priorities are set.

The aim to form economic and social development groups is to overcome the problems together, especially poverty reduction as well to create common market. It has been hard to attain these goals because of internal war and the dictatorship rule in some countries. This is a challenge not only to Tanzania but also Eastern and Southern African countries, they should work together to attain the goals. For Tanzania policy reforms should go in hand with conducive environments. Thus investors especially in the manufacturing and agriculture sectors who mostly expect gains from production from around the same area are encouraged to invest in the country. The number of potential buyers in Tanzania and around the neighbour countries in general is very low as they are all in low income group of countries which makes it hard to attain investment goals.

Table 2.2, World Bank Classification of Economies

	Sub-Saharan Africa		Asia		Europe and Central Asia	Middle East and North Africa	
Income Group	East and Southern Africa	West Africa	East Asia and Pacific	South Asia	Eastern Europe and Central Asia	Middle East	Americas
Low Income	Angola Burundi DRC Eritrea Ethiopia Kenya Lesotho Madagascar Malawi Mozambique Rwanda Somalia Sudan Tanzania Uganda Zambia Zimbabwe	Benin Burkina Faso Cameroon Central African Rep. Congo Rep. Cote d'Ivoire Equatorial Guinea Gambia Guinea Guinea-Bissau Liberia Mali Mauritania Niger Nigeria Sao Tome and Principe Senegal Sierra Leone	Cambodia Indonesia Korea Dem. Rep Lao PDR Mongolia Myanmar Papua New Guinea Solomon Islands Timor-Leste Vietnam	Afghanistan Bangladesh Bhutan India Nepal Pakistan	Azerbaijan Georgia Kyrgyz Republic Moldova Tajikistan Uzbekistan	Yemen Rep. of	Haiti Nicaragua

Source: WB, Global Economic Prospectus (2003).

2.4 Economic Performance during 1990-2007

As stated earlier in the brief history of Tanzania, the economy of Tanzania was highly state controlled economic system engaged in the pursuit of socialism policies. The centrally controlled economy led to inflexible economic system that was characterized by monopolistic and heavily regulated production structures in all sectors of the economy. The rigidity of state-controlled economic system, Kagera war with Uganda and external shocks in the late of 1970s were among factors which resulted in major macroeconomic imbalances, economic stagnation and a decline in per capita income for long period of time, as a consequence GDP shrunk, shortage of basic consumer goods appeared and agricultural exports collapsed.

By the mid the 1980s, the government had realized that the past economic policies and development strategies were not adequately responding to changing market-oriented and technological conditions in the regional and world economy, further more were not adapting to changes in the domestic social economic condition.

The government of Tanzania in the mid 1980s gradually began to liberalize economic policies and pursuing market-oriented reforms. Reaching in the middle of 1990s, the economic policy reforms were intensified resulting in significant progress in macroeconomic stabilization and an accelerated economic growth.

Table 2.3 below shows that an average economic growth between 1990 and 1995 is 2.7 percent. However the average growth between 1996 and 2007 is 5.1 percent. The acceleration of economic growth resulted from the gradual liberalization of economic and market oriented policies. Observe also the selected key sectors of the economy. They all realized growth, even though some remained very low in the contribution to general growth performance. This is because growth in almost all mentioned sectors in the table was driven by newly established investments; which require time to reflect the performance on economic growth.

It can also be seen from table 2.3 that while more than one-third of growth performance since 1996 resulted from agricultural growth performance, another one-third has reflected growth in services, remarkably trade and tourism followed by construction and manufacturing. While exhibiting high sectoral growth rates the mining sector did not contribute very significantly to higher growth performance. This is due the increased imports of capital that was required for new investments.

Table 2.3, Tanzania Real Growth and Inflation 1990 - 2003 (%)

	Average Growth 1990 - 1995	Contribution to Growth Performance	Average 1996-2007
Real Growth	2.70		5.41
Sectoral Components of GDP			
Agriculture	3.60	1.80	4.10
Industry	1.80	0.40	7.00
Mining	11.70	0.10	15.30
Manufacturing	0.70	0.10	6.00
Electricity and Water	4.40	0.10	4.90
Construction	0.70	0.20	6.70
Services	1.90	0.60	5.10
Trade, hotels, and restaurants	2.20	0.40	5.70
Transport and communications	4.10	0.20	5.20
Financial and business services	2.00	0.10	4.80
Public administration and other services	-1.50	0.00	3.20
Inflation	26.23		6.38

Source: Data from BOT and NBS

2.4.1 Government Policies, Openness and Trade

The significant importance of foreign and domestic trade on the economy is vital, as a result Tanzania has pursued a diverse economic policy reforms aimed at promoting trade and enhance economic growth and social development. In order to

stimulate and increase domestic production to meet demand and promote exports, the government has taken several measures including trade policies such as non tariff barriers to trade (NTB). Also measures and initiatives have been taken to promote export sector. Export Development Strategy (EDS) has been initialized aimed at the establishment of environment and framework for increasing exports. Along with an establishment of EDS, the government adapted the National Trade Policy 2003, to enable the country identify appropriate means of planning and controlling the economy through a viable and steady path towards the competitive export-led growth for the realization of poverty reduction goal.

Through various policy reforms as we have seen the government of Tanzania achieved trade openness as well as opening doors into the international markets. As a consequence imports increased rapidly. Table 2.4 shows imports and exports for the past nineteen years. As it can be seen in the beginning of 1990s imports were very low. It was through trade policy reforms, trade openness was attained and imports began flowing rapidly in the end of 1990s. As we can observe imports stand at six billion US dollars in 2007, which is an appealing increase compared to ten years earlier. This increase in imports has many outcomes that have a bearing on productivity, especially in economies like Tanzania that experienced long periods of import compression due to falling import capacity and rationing as a deliberate policy⁸.

⁸ A.V.Y. Mbelle, "Productivity Performance in Developing Countries, Country Case Studies: Tanzania", (http://www.unido.org/fileadmin/import/60400_05_Tanzaniarevised.pdf), 7 March, 2009, United Nations Industrial Development Organization (UNIDO), 2005, p: 41

Table 2.4, Imports and Exports

Year	Imports (Millions US \$)	Exports (Million US \$)	Degree of Openness (%)
1990	231.40	879.24	53.27
1991	271.4	1037.50	50.06
1992	392.7	964.73	60.84
1993	531.7	709.67	69.11
1994	666.3	712.00	80.74
1995	770.8	941.00	63.64
1996	702.4	1084.00	52.26
1997	703.1	770.60	52.26
1998	907.5	630.40	42.51
1999	1,061.40	543.20	42.63
2000	1,068.40	663.30	41.10
2001	1,502.90	776.40	37.96
2002	1,605.40	902.50	39.79
2003	2,206.60	1216.20	38.92
2004	2,972.10	1473.10	45.32
2005	3,719.60	1676.30	N/A
2006	4,845.10	1736.00	N/A
2007	6,005.20	2007.60	N/A

Source: Data from BOT, NBS and PWT

On the other hand trade policy reforms have not been reflected much on exports as we saw on imports. As seen from table 2.4, export performance is very low compared to the imports. This tells us that total trade percentage of GDP is highly explained by imports. In this case efforts have to be stepped up to increase exports and bring about a favorable trade balance which account for total trade percentage of GDP, computed by the degree of openness.

Total Trade percentage of GDP is computed as follows:

$$Openness(\%) = \frac{(Imports + Exports)}{GDP}$$

Before the adaption of liberalization measures, the coefficient of openness measured 18.78% on average between 1980 and 1984 (not seen in the table) which is very low compared to 34.02% measured between 1986 and 1990 on average. This rose to above 50% in the mid of 1990s when the economy was partially liberalized. The highest degree of openness measured 80.74% in 1994 and on average during 1991 and 2000 was 55.51%. As stated earlier the degree of success depends on the policy and strategies applied and vary from one country to another. However, (from different countries experience) there seems to be general agreement that international trade openness is the central element of successful economic growth strategies. Tanzania has achieved international trade openness through policy reforms including tax holidays, promotion of Export Processing Zones, bilateral agreements, public education (reforms on public education will be covered later in this chapter) and improved infrastructure to mention but a few.

The success in attraction of FDI also reflected the government's implementation of major and critical macroeconomic and social development reforms, as well as presence of political stability and the rule of power. Further more, the government of Tanzania offered fiscal incentives in particular for the mining sector that included generous depreciation allowances, indefinite loss carry forward, exemptions from import duties and the value-added tax, and some income tax holidays. The mining companies in Tanzania claim that the implementation of such fiscal policy regime has been important and helped in attracting and maintain operations in the country.

2.4.2 Economic Growth and Productivity Trends

We have seen that prior the independence Tanzania followed socialism policies in which the economy was centrally controlled by the government. The centrally controlled economy was characterized by monopolistic and heavily regulated production structures in all sectors of the economy. Reaching the early 1980s its

policies and social development strategies were not responding to the changing free market oriented and technological conditions which led to economic system failure and growth stagnation.

The economic system failure led the government to begin seeking measures to overcome such situation. In the mid 1980s the government of Tanzania gradually began to liberalize economic policies and pursue market-oriented reforms. In the transition period since the mid of 1980s to date, the economy of Tanzania has undergone major changes and policy reforms. These reforms were based on the pillars of the economy and social development such as privatization, state liberalization and macroeconomic stabilization.

Through various economic reforms the government has achieved a certain level of trade openness as well as introducing itself into the international markets. The reforms led to the attraction of FDI and hence realized significant growth in the key sectors of the economy including financial, ICT, manufacturing, construction, mining and tourism.

The growth in FDI inflows in turn reflected the implementation of major and critical macroeconomic and social development reforms, as well as presence of political stability. Major reforms made in order to attract FDI included exemptions from import duties and the value-added tax, and some income tax holidays. Also the government of Tanzania offered fiscal incentives in particular for the mining sector that included generous depreciation allowances and indefinite loss carry forward.

The performance of economic growth is in the appealing rate but still a lot has to be done in order to increase sectoral performance and reflect results in the real gross national income. Industrial output have not contributed much to the gross national income (GNI), manufacturing is still at its low pace. Consider table 2.5, it shows the list of some selected manufactured commodities. Even though the growth in the

manufacturing sector significantly showed good performance the truth remains that its impacts on growth will be hardly reflected, if more efforts would not be addressed to widen the sector and increase exports.

Table 2.5, Production of selected manufacturing commodities (1990-2003)

Commodity	Unit	Average(1990-1995)	Average(1996-2003)
Consumer Goods			
Sugar	Metric tons(thousands)	109.20	154.80
Textiles	Square meters(Millions)	52.80	70.50
Soft Drinks	Liters(Millions)	83.20	168.00
Beer	Liters(Millions)	60.90	167.50
Cigarettes	Pieces(Millions)	3.70	3.80
Intermediate Goods			
Cement	Tons(thousands)	766.40	862.90
Rolled Steel	Tons(thousands)	8.90	16.10
Iron Sheets	Tons(thousands)	22.10	22.40
Aluminum	Tons(thousands)	2.50	0.20
Petroleum Products			
Products	Tons(thousands)	346.20	273.10
Paints	Liters(Millions)	2.40	9.30

Source: IMF

Investments increased especially in the mining, tourism and construction sectors which promoted employments and to a certain level boosted life standards. However, more efforts need to be put in to attract more investors in the manufacturing sector. Manufacturing of machinery and IT-oriented tools would create better working environments and further promote growth. Until recent past we observed a rapid growth in the mining sector, however it has not contributed much to the economic growth due

to the large imports of capital industrial machines. As revealed from table 2.5 the manufacturing of machine tools in the country does not exist.

Transport infrastructure in Tanzania, is not sufficiently developed to support a balanced growth of the economy and achieve the goal of poverty reduction, notably less populated areas of the country. There are on going government and donors projects aimed to improve the country's road network and railways system in order to easily transfer goods and services from urban to rural areas and bring about growth balance. Measures are also being taken to attract more investors in the agricultural sector, which lead to promote growth in the rural areas due to the availability of land. Lack of infrastructure lead to large quantity of investments to flow to the reach and urban areas for instance in Dar Es Salaam, as a result both capital and labor are highly glowing to this areas. Technological flows also reinforce other factors of production to flow in the same direction. This is true following the argument that, If a rich area is rich because technology (A) is more advanced then all other factors of production will tend to flow towards this rich area, reinforcing the concentration⁹.

Reflecting policy reforms in each sector, production in agricultural sector varied significantly by crop. Table 2.6 shows the production and exports of some selected crops. The production and exports of crops including tea and tobacco improved marking the result of export policy liberalization on producer prices and the efficiency of private traders. However the production and exports of other crops mainly cotton declined as a result of structural factors adversely affecting the performance of agricultural production including limited access to markets resulting due to infrastructure, incentives for production by the crop boards and absence of a stable system for providing inputs on credit¹⁰. The production and exports of other products notably processed food; fish

⁹ Ibid, William Easterly, Rose Levine, 2001, p: 208

¹⁰ "Tanzania Pilot Rural Investment Climate Assessment, Stimulating non-farm Micro-enterprise Growth, Sustainable Development Network (SDN)", World Bank Report No. 40108-TZ

and horticulture have also been boosted by the liberalization of the economic policy reforms.

Table 2.6 The Production and Exports of some Selected Crops

Crop	Years	1980	1985	1990	1995	2000	2001
Coffee	Production (Metric tons)	48910	46225	52100	41150	46300	58800
	Exports (Metric tons)	44000	44000	60000	48000	51000	47000
	Exports (Billion USD)	0.145	0.183	0.083	0.141	0.110	0.062
Tea	Production (Metric tons)	16500	15000	17800	24000	22500	25000
	Exports (Metric tons)	14000	11000	14300	23000	23000	23500
	Exports (Billion USD)	0.025	0.020	0.025	0.030	0.045	0.035
Cotton	Production (Metric tons)	185000	110000	150000	248000	175000	200000
	Exports (Metric tons)	48000	50000	57000	80000	47000	47000
	Exports (Billion USD)	0.040	0.028	0.067	0.125	0.040	0.040
Cashew Nuts	Production (Metric tons)	41000	38000	21000	81000	105000	120000
	Exports (Metric tons)	14000	22000	12000	82000	105000	103000
	Exports (Billion USD)	0.010	0.020	0.080	0.075	0.100	0.065
Tobacco	Production (Metric tons)	20000	16500	19000	23000	32000	27000
	Exports (Metric tons)	9000	9500	9500	17500	26000	18000
	Exports (Billion USD)	0.012	0.010	0.010	0.032	0.034	0.034

Source: Data from BOT (2004)

(<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTARD/0,,contentMDK:21424706~pagePK:148956~piPK:216618~theSitePK:336682,00.html>), Eastern Africa Country, Cluster 1, African Region, 2007, p: 3

Agricultural sector performance included the opened market and the processing of traditional export crop to the private sector through legislation and accompanying regulations, adapted agriculture and livestock policy, as well as cooperative development policy.

2.4.3 Reforms on the Sector of Education

Both the theoretical and empirical growth researches argue that technological change is the main source of economic growth. Differences in the rate of technological change are the principal cause of income differences across countries¹¹. Education leads to a better understanding of relationship between economic growth and other major determinants of technological change and can also help policy makers when defining policies. For technological change to occur, a country needs to engage in innovation activities that primarily use human capital as an input.

Education also links together R&D and ICT which are the most powerful engines of growth. Economic theory emphasizes the accumulation of R&D and human capital in explaining economic growth¹². A country will benefit more by coordinating reforms in education and other technological change determinants than by focusing on each policy individually, i.e. simultaneous reforms will have a greater impact on economic growth.

It is in that context the government of Tanzania together with taking measures to stabilize macroeconomic conditions extended reforms to the education sector in order to revive the education sector which experienced deterioration during the 1980s and 1990s. The Tanzanian education system was suffering from lack of funding, leading to

¹¹ Ibid., Easterly, Levine, 2001, p: 178

¹² Rachel Griffith, "How Important is Business R&D for Economic Growth and Should the Government Subject it?", The Institute for Fiscal Studies, Briefing Note No., 2, Published by the Institute of Fiscal Studies, London, UK, 2000 p: 2

neglected schools and poorly trained and under-motivated teachers, teaching, where possible, irrelevant curricula with no teaching resources.

In order to deal with the above discrepancies, in the past decade the government did major changes and reforms in the education sector aimed at boosting the education quality at all levels as well as enroll more students to higher learning institutions. Also to ensure that a nation produces the quantity and quality of educated people sufficiently equipped with the required knowledge to solve the society's problems, meet the challenges of development and attain competitiveness at regional and global levels.

Some of the major steps that have taken to meet the above objectives include extended loans to students enrolled in the private universities and increased number of students joining higher learning institutions. Also construction of new universities and the Primary Education (PE) plan were brought into account in order to increase level of education. The Primary Education plan was brought in to ensure that all children benefit from primary education. This plan has gone some way to alleviate the enrollment problem.

3 Foreign Direct Investment in Tanzania

3.1 Definitions and Foreign Direct Investment in Tanzania

In chapter two we reviewed the short history of Tanzania and covered economic growth and development experience of Tanzania. We also discussion was also extended to the reasons for economic failure and the measures taken by the government to revive the economy. We saw major steps the government of Tanzania has undertaken in economic policies and through the reforms these policies the government achieved trade openness as well as introducing the country into the international markets. These achievements included the significant attraction of FDI. Also World Bank classification of economies was presented aimed at presenting the position and the group Tanzania belongs. In this chapter foreign direct investment its impacts on the society will be covered in this chapter.

Various general FDI issues are of very great importance to various countries and have to be studied and discussed closely in the local contexts of these countries. Being main topic of this dissertation clear understanding of its role on the economy of Tanzania is necessary. Before proceed with discussion of FDI in Tanzania, clear understanding of the meaning of FDI in presented.

FDI is defined as an investment in businesses of another country which often takes place in the form of setting up of local production facilities or the purchase of existing businesses¹³. The analysis contrasts FDI with portfolio investment which is the acquisition of securities. There are also various media releases by the United Nations Conference on Trade and Development (UNCTAD), in which FDI is defined as an investment involving management control of a resident entity in one economy by an enterprise resident in another economy. FDI involves long-term relationship reflecting

¹³Maitena Duce, "Definitions of Foreign Direct Investment (FDI): A Methodological Note", Banko de Espana, International Economics and International Relations Department, 2000, p: 3

an investor's lasting interest in a foreign entity. FDI definitions differ greatly across countries. It is argued that the differences are likely to be based on the criterion of the percentage of ownership of shares (i.e. control) between foreigners and domestic firms or state in the destination country.

3.2 Foreign Direct Investment in Tanzania

FDI is still in its infancy in Tanzania. It is still a relatively new concept in this country which had a socialist orientation until in the mid of 1980s. We saw in the previous chapter that efforts have been made by the government of Tanzania to boost domestic and attract more investments from abroad. The early intention of the government was shown in 1963. Foreign Investment Act was passed in order to persuade FDIs in the newly independent. Such efforts were somewhat unsuccessful since the government opted for a socialist path of economic development since 1967, following the Arusha Declaration.

This socialist policy decision led to an implementation of the political manifesto the Arusha Declaration in 1967. The Ministerial Order under the Industrial (Acquisition) Act Number 5 of 1967 required all Multinational Enterprises (MNEs) operating in the country as well as big private businesses owned by Tanzanians in Mainland Tanzania to make the government of Tanzania the majority shareholder of such companies. Hence, from 1967 to 1972 the majority of the MNEs and big local companies operating in Tanzania since independence were nationalized. The Public Corporations Act Number 17 of 1969 was created to put all nationalized companies under the government control and management.

There were minimal FDI activities taking place in Tanzania during 1970 and 1985. The majority of the investments were made by the State directly or indirectly. By 1980 there were about 400 public owned corporations and companies – State Owned Enterprises- (SOE). The majority of these were owned by the Tanzanian government

with 100 per cent shares. In some of them it owned between 49 and 100 per cent. Foreign investors owned the rest of the shares in companies that needed large capital investments. Examples of such companies include the Tanzania – Italia Petroleum Refinery Company Ltd (TIPER); Aluminum Africa; Shell and British Petroleum (BP).

The revival of the foreign investment attraction came in the mid of 1980s when, among other things, the government of Tanzania found that it could not cope with the ailing and ill-managed public enterprises and companies. Deliberate economic liberalization policies were initiated and implemented. Reforms in financial institutions, public sector, civil service and other areas were made and are still underway to fine-tune the attraction of FDIs in the country. A law (National Investment Act 1997) was passed in 1997 in order to promote local and foreign investments in the country.

As it has been stated earlier, this work assumed that FDI is necessary and a required tool for the growth of economies and Tanzania in particular. The assumption is based on the potentially positive roles that FDI can play in the development of the country. FDI is argued to be a driving force in the globalization process that characterizes the modern Tanzania economy¹⁴. This justifies the concern about the need for and ability of the country to increase its global share of FDI inflows to promote economic growth. The process has diminished the importance of territorial boundaries and every part of the world is involved in the process. As a result the country has increased its global share of FDI.

In the beginning of 1960s towards the end of 1970s, the economy of Tanzania like many other developing countries, in order to finance their own investments was encouraged to borrow on the international markets. It is argued that this alternative was one of the most expensive ways to finance capital accumulation. This strategy led many

¹⁴ Rajneesh Narula, “Multinational Firms, Regional Integration and Globalizing Markets. Implications for Developing Countries”, MERIT – Infonomics Research Memorandum Series, Maastich, The Netherlands, October 2001, p: 30

developing countries, including Tanzania, accumulated huge debts. No thanks to these huge debts, they have less accessibility to international capital. Long-term bank lending completely disappeared in developing countries since the mid-1980s.

Due to the less accessibility to international accumulation, FDI was seen as an alternative means of financing investments in developing countries¹⁵. Since the mid of 1980s private inflows of capital into Tanzania and surrounding region have mainly consisted of FDI and short- term bank lending. It is now widely recognized that FDI can play a useful role in economic growth. The usefulness of FDI is not only due to its financial contribution; rather, it is important because of other characteristics of FDI when it forms part of a package investment options¹⁶.

In this contention here are some reasons why FDI not only play an important role in the financial contribution; rather it is important because it forms part of a package investment options¹⁷ ¹⁸. FDI can;

- create employment in host economies;
- be vehicles of transfer of technology;
- provide superior skills and management techniques to host economies;
- help in the capital formation process;
- facilitate local firms' access to international markets;
- use local resources more efficiently and productively;
- increase product diversity;

¹⁵ “World Investment Report, Cross-Border, Merges and Acquisition and Development”, United Nations Conference on Trade and Development (UNCTAD), (http://www.unctad.org/en/docs/wir2000_en.pdf), 7 May, 2009, United Nations Publications, New York and Geneva, 2000, p: 17

¹⁶ Honest P. Ngowi, “ Can Africa Increase its Global Share of Foreign Direct Investment”, West Africa Review, 2001, p 27

¹⁷ Ibid., Rajneesh Narula, 2001, p: 23

¹⁸ Ibid, Honest P. Ngowi, 2001, p: 29

- use environmentally clean technology;
- observe human and labor rights and;
- create a lot of linkage-effects in the economy, both forward and backward.

Based on the above benefits that can result from FDI, it can generally said to be an engine of economic growth in a host economy if well planned and economic polices well applied; for that matter FDI can sustain and improve economic growth in a country or a region. Given the economic conditions in Tanzania and its level of development, the need for FDI in the region must be overemphasized. The country needs to increase its share of global FDI flows as one of the most likely ways to increase the needed external capital for its development.

3.3 Distribution of FDI in Tanzania

Due to the absence of recent information on FDI, it has been a difficult task to accomplish FDI estimations in Tanzania. The latest investment report published by the Bank of Tanzania in collaboration with Tanzania Investment Center and Bureau of Statistic (Tanzania Investment Report, 2004) has the latest information on FDI ending in the year 2001, other information were obtained from the World Bank and International Labour Organization (ILO). In order to obtain the realistic picture of FDI distribution this section relies on FDI stock rather than FDI inflows due to high fluctuations characterizing the FDI inflows. However, the data of FDI net inflows will be used in later discussion in the testing for the effect of FDI on GDP growth.

FDI holds the largest share of the foreign private capital flows, which also include foreign financial investments which lead to long and short term loans¹⁹. In 2001, for instance FDI stock contributed about 88.6 percent of foreign private capital stock. This shows that FDI is an important foreign investment in the economy of

¹⁹ Ibid., “Tanzania Investment Report”, BOT, NBS and TIC, 2004, p: 3

Tanzania. As regards FDI components, direct equity investment forms an important component of FDI in Tanzania contributing about 76.3 percent of FDI stock in 2001.

3.3.1 Sectoral Distribution of FDI Inflows

The largest sector for FDI inflows is believed to be the transport, storage and communication sector with about 33.9 percent of total FDI stock by 2001, while the second largest sector for FDI is believed to be manufacturing with about 17 percent of total FDI stock by the same year²⁰ table 3.1. Much of the FDI in the manufacturing sector went to food and beverages, while in the mining sector; the largest single sub-sector in terms of FDI has been the gold mining industry. The ability of Tanzania to attract mineral explorations and investment has been highly dependent on the country's abundance of mineral resources. However, during 1990s this was boosted by the revised, investor-friendly investment and mining code introduced in 1998, which was well received by international investors. There has been a dramatic growth in the mining sector since the 1990s. In 1998, for instance, Tanzania was the leading country in Africa in terms of the number of exploration activities above traditional mining countries of South Africa and Ghana.

The manufacturing and mining sectors are leading with the highest concentration of FDI. However it should be noted that agricultural sector is the pillar to the economy of Tanzania with a contribution of about 50 percent of Gross Domestic Product (GDP) but, the sector contributes only about 6.7 percent of the total FDI stock in the economy. This is a challenge to the government and policy makers to attract foreign investors who may have competitive advantage in the sector. Tanzania can attract foreign investors in the following areas: cattle breeding, fruit production and canning, fruit juice production, flower production, cattle and game ranches and timber

²⁰ Honest P. Ngowi, "Foreign Direct Investment Entry Modes in Tanzania: Types, Driving Forces and Implications:", *Tanzanet Journal*, Volume 3(1), 2002, p: 6

production. Attraction of FDI in the agro-processing industries can also be a key in the development of the agriculture sector.

There are some praiseworthy efforts that have been made by the government to pursue macroeconomic policies that will motivate investment in agricultural sector by small and large-scale commercial farmers through creation of enabling environment and provision of proactive support to private operators, farmer’s organizations and other stakeholders and by ensuring a strong regulatory mechanism as well as policy reforms as has been widely covered in the previous sections. There have been substantial improvements in road infrastructure through TANROADS whereby roads connecting major regional centers and to neighboring countries have been improved. Also TIC in collaboration with the Ministry of Lands and Human Settlement Development has been mandated to establish land bank for investors. In this regard, 4.0 million acres of land have been identified. The Land (Amendment) Act (2004) has also been amended to allow land to be used as capital for investment²¹.

Table 3.1: Sectoral Distribution of FDI Inflows in Tanzania, 1999 – 2001 (Million USD).

Sector and Sub-sector	1999	Percentage	2000	Percentage	2001	Percentage
-Agriculture, hunting, forestry and fishing	23.4	4.3	50.4	17.9	47.7	10.2
- Crops	21.2	3.9	50.0	17.7	46.5	9.9
-Hunting and forestry	1.3	0.2	0.1	0.0	-0.1	0.0

²¹ Elibariki Msuya, “The Impact of Foreign Direct Investment on Agricultural Productivity and Poverty Reduction in Tanzania”, MPRA No. 3671, Kyoto University-Japan, 2007, p: 7

-Livestock	0.2	0.0	0.4	0.1	0.6	0.1
-Fishing	0.7	0.1	0.0	0.0	0.7	0.1
-Mining and quarrying	296.5	54.8	5.6	2.0	41.6	8.9
Manufacturing	94.9	17.5	50.4	17.9	57.5	12.3
-Other manufacturing	18.7	3.5	20.0	7.1	7.3	1.6
-Food and beverages	43.1	8.0	6.7	2.4	18.1	3.9
-Chemicals and petroleum	14.3	2.6	4.2	1.5	16.0	3.4
-Agro-industry	16.4	3.0	19.4	6.9	15.7	3.4
-Machinery, motors and equipment	2.4	0.4	0.1	0.0	0.5	0.1
-Utilities	0.0	0.0	0.2	0.1	83	17.8
-Gas	0.0	0.0	0.2	0.1	82.5	17.7
-Electricity	0.0	0.0	0.0	0.0	0.5	0.1
-Water	0.0	0.0	0.0	0.0	0.0	0.0
-Construction	28.4	5.2	8.7	3.1	8.9	1.9
-Wholesale and retail trade, catering and accommodation services	65.3	12.1	59.2	21.0	59.0	12.6
-Accommodation, tourism and catering	21.0	3.9	11.5	4.1	26.0	5.6
-Wholesale and retail trade	44.3	8.2	47.7	16.9	33.1	7.1
-Transport, storage	15.8	2.9	100.7	35.7	158.3	33.9

and communication						
-Communication	9.4	1.7	100.0	35.5	156.8	33.6
-Transport and storage	6.4	1.2	0.6	0.2	1.5	0.3
-Finance, insurance, real estate and business services	15.1	2.8	3.5	1.2	8.9	1.9
- Finance, insurance	7.2	1.3	3.0	1.1	1.0	1.5
-Other business services	4.3	0.8	0.4	0.1	0.8	0.2
-Real estate	3.6	0.7	0.1	0.0	1.2	0.3
-Community, social and personal services	2.1	0.4	3.5	1.2	2.2	0.5
-Health	0.5	0.1	0.6	0.2	0.8	0.2
-Other community, social and personal services	0.4	0.1	2.8	1.0	0.2	0.0
-Media	1.2	0.2	0.0	0.0	1.2	0.3
-Education	0.0	0.0	0.1	0.0	0.0	0.0
Total	541.5	100.0	282.0	100.0	467.2	100.0

Source: TIC and BOT (2004: 30)

Developing countries, Tanzania in particular stresses changes to bring about sustainable growth in agriculture and its productivity in order to achieving sustainable growth and significant poverty eradication which is an important step towards achieving the MDGs. Both developmental and agricultural economists view productivity growth

in the agricultural sector as critical if agricultural output is to increase at a sufficiently rapid rate to tackle poverty²².

In view of the declining arable land per capita, high production costs, combined with rapid population growth and the resulting need for human settlement, and rising urbanization, significant improvements are required in productivity growth in agriculture in order to increase agricultural output through technological innovations and efficiency. Limited development and adoption of new production technologies essential for improving productivity by the poor are mostly due to limited income and sources of credit. In this manner FDI can play a significant role in increasing productivity by offsetting the investment and technological gap.

The evaluation of FDI and its impacts on agricultural activities and productivity in Tanzania is also a basic step in understanding the relationship between agricultural productivity, FDIs and economic growth. There have been developed some literature administering FDI flow to Tanzania; the existing findings however, focuses on the determinants of FDI, the impact of FDI on local firms and FDI entry modes to Tanzania, with very little discussion of the impact of FDI on agricultural productivity, and the results on poverty eradication.

This work attempts to overcome and examine the impact of FDI on agricultural productivity in Tanzania by reviewing empirical evidence. More specifically, this research paper examines the role of FDI in increasing efficiency of smallholder farmers and thus their productivity. Factors that hinder FDI flow to the agricultural sector are also highlighted. It emphasizes a new approach to the promotion of investment to the sector that is based on further integration of smallholder farmers in the national, regional, and global value chain.

²² D. D. Headey, P. D. S. Rao, M. Alauddin, "Explaining Agricultural Productivity Levels and Growth : An International Perspective", Feb. 2005, p: 4

FDI flow into agricultural industry in Tanzania is important for three main aspects. The first is that, the agricultural sector plays an important role in the economy of Tanzania and has the potential to advance the country's economic growth objectives and eradication of poverty. Agriculture contributes the most to GDP (over 45% of the GDP) and supports livelihoods of over 75 percent of Tanzanians living in rural areas. Agricultural products contributed about 21.3% in 2005 of Tanzania's export earnings²³.

Secondly, since over 75 percent of the Tanzanian population live in rural areas and depend on agricultural activities for living. It's important that any strategies and policies made to address poverty involve actions and steps to improve agricultural productivity and boost incomes. As growth is the single most important factor affecting poverty reduction, FDI flow into the sector is thus central to achieving that goal.

Lastly, FDI is argued to have important roles in the contribution to economic growth, boosting a country's technological level, creating new and rewarding employments as well as building up management skills in developing countries. It is also believed that FDI works as a means of integrating developing countries into the global market place and increasing the capital available for investment, thus leading to increased economic growth needed to reduce poverty and raise living standards²⁴. As a result more efforts are need to attract FDI into the agricultural sector in order to reduce poverty income as well as utilize agricultural raw materials by creation of industries. The creation of industries will lead to an increased production and agricultural products.

²³ "Tanzania Investment Report, Report on the Study of Foreign Capital Flows in Mainland Tanzania", (http://www.bot-tz.org/Publications/TZInvestmentReports/TZ_Investment_Rept_Dec_2001.pdf), 17 Dec, 2008, BOT, TIC and NBS, 2001, p: 4

²⁴ David Dollar, Aart Kraay, "Trade, Growth and Poverty", The World Bank Policy Research Working Paper, No., 2615, (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=632684), 12 April, 2009, Development Research Group, Development Economic Group, The World Bank, USA, 2001, p: 18

3.3.2 Regional Distribution of FDI Inflows

Table 3.2 shows the concentration of FDI stock in Tanzania. As revealed in the table FDI stock is highly concentrated in the Dar Es Salaam region with about 75.7 percent of FDI stock by 2001. Most of foreign investments are located in Dar es Salaam simply because it is the country's business and financial hub, and has a relatively well-developed infrastructure that supports a wide range of economic activities. Mwanza and Shinyanga regions are also among the top recipients of FDI mainly because they are endowed with abundant natural resources, especially minerals. Mwanza region is situated in the cost of Lake Victoria, as a result has the biggest fishing industries and resources which have attracted foreign investors²⁵. Arusha has also attracted substantial amount of FDI flows due to its commercial and tourist activities. The region's favorable weather has created an added advantage for a wide variety of agricultural activities. However, with this kind of distribution, a very small section of the country has benefited directly from the improved performance of FDI inflows. There is need for the government to earmark potential areas of investment and improve social and economic infrastructure in the regions with less FDI inflows.

²⁵ Lucy Wagner, "Privatization: A Challenge for Sub-Saharan Africa"; OECD Development Centre, Policy Insight No: 1, 2004, p: 4

Table 3.2: Regional Distribution of FDI Inflows, 1999 – 2001 (Million USD)

Mainland Regions	1999	Percentage	2000	Percentage	2001	Percentage
-Dar Es Salaam	358.3	66.2	182.5	64.7	353.9	75.7
- Mwanza	21.4	3.9	5.0	1.8	15.5	3.3
- Shinyanga	84.5	15.6	0.0	0.0	24.2	5.2
- Arusha	23.6	4.4	12.2	4.3	12.8	2.7
- Morogoro	12.0	2.2	31.9	11.3	30.7	6.6
- Iringa	4.7	0.9	0.1	0.0	0.5	0.1
- Tanga	5.8	1.1	0.7	0.2	10.8	2.3
- Kilimanjaro	13.9	2.6	42.4	15.0	12.4	2.7
- Mbeya	0.3	0.1	0.0	0.0	0.1	0.0
- Manyara	0.0	0.0	0.0	0.0	4.6	1.0
- Coast	0.1	0.0	0.3	0.1	0.1	0.0
- Mara	11.5	2.1	1.2	0.4	0.0	0.0
- Ruvuma	0.0	0.0	0.0	0.0	0.0	0.0
- Kagera	0.0	0.0	0.0	0.0	0.0	0.0
Sub total	536.2	99.0	276.3	98.0	465.8	99.7
Zanzibar regions						
- Urban West	2.8	0.5	2.9	1.0	1.1	0.2
- North Unguja	1.8	0.3	2.5	0.9	0.1	0.0
- South Unguja	0.4	0.1	0.3	0.1	0.3	0.1
- South Pemba	0.3	0.1	0.0	0.0	0.0	0.0
Sub total	5.4	1.0	5.7	2.0	1.4	0.3
Grand total	541.6	100.0	282.0	100.0	467.2	100.0

Source: TIC and BOT (2004: 31)

3.3.3 FDI Distribution by Regional Groupings and Country of Origin

The distribution of FDI stock by regional groupings as it can be observed from table 3.3 shows that the Organization for Economic Co operation and Development (OECD) countries were leading with about 57.2 percent of total FDI stock in the country by 2001. However, much of this FDI stock from the OECD countries originated from the United Kingdom and Canada. SADC group of countries were the second largest registering about 24.5 percent of total FDI stock by 2001. Almost three-quarters of the FDI originating from the SADC group of countries come from South Africa²⁶. This is mainly because of the surge of the South African investment into Tanzania in 2000 and 2001 especially in the mining, manufacturing and telecommunication sectors.

Table 3.3: FDI Stocks in Tanzania by Country of Origin, 1999 – 2001 (Values in Million USD)

Country/country group	1999	Percentage	2000	Percentage	2001	Percentage
East African Countries	61.2	2.5	115.2	3.8	277.1	7.3
- Kenya	55.8	2.3	113.7	3.7	275.5	7.3
- Uganda	5.4	0.2	1.5	0.0	1.6	0.0
SADC Countries	244.7	10.1	716.7	23.6	926.8	24.5
- South Africa	140.3	5.8	529.4	17.4	749.2	19.8
- Mauritius	89.0	3.7	175.8	5.8	171.4	4.5
- Other SADC Countries	15.4	0.6	11.5	0.4	6.2	0.2

²⁶ Ibid, Rajneesh Narula, 2001, p: 14

Rest of Africa	431.7	17.8	157.5	5.2	182.4	4.8
- Ghana	418.7	17.3	149.9	4.9	174.9	4.6
- Other rest of Africa	13.0	0.5	7.6	0.3	7.5	0.2
OECD Countries	1,487.3	61.5	1,847.4	60.8	2,161.9	57.2
-United Kingdom	495.4	20.5	569.1	18.7	615.4	16.3
- Canada	184.0	7.6	406.7	13.4	430.60	11.4
- Japan	3.7	0.2	190.9	6.3	172.2	4.6
- USA	161.7	6.7	182.0	6.0	174.1	4.6
- EU ²⁷	0.0	0.0	14.8	0.5	146.9	3.9
- Switzerland	30.1	1.2	127.5	4.2	115.5	3.1
- Netherlands	117.2	4.8	47.1	1.6	105.4	2.8
-Italy	57.9	2.4	57.5	1.9	63.6	1.7
- Germany	51.0	2.1	22.4	0.7	52.6	1.4
- Australia	177.7	7.3	43.4	1.4	49.8	1.3
- Denmark	47.6	2.0	36.3	1.2	35.5	0.9
- France	47.1	1.9	20.5	0.7	33.6	0.9
- Sweden	34.2	1.4	24.6	0.8	29.7	0.8
- Norway	36.9	1.5	31.7	1.0	26.2	0.7
- Luxembourg	36.9	1.5	31.7	1.0	26.2	0.7
-Other OECD Countries	15.5	0.6	24.4	0.8	30.7	0.8
Rest of the World	194.0	8.0	201.5	6.6	228.6	6.1

²⁷ FDI from EU as an institution

- Malaysia	48.5	2.0	71.9	2.4	72.1	1.9
- China	10.6	0.4	23.0	0.8	23.7	0.6
-United Arab Emirates	3.0	0.1	17.7	0.6	17.0	0.5
- India	5.6	0.2	11.1	0.4	15.0	0.4
- Russia	2.1	0.1	16.7	0.5	14.3	0.4
- Other Rest of the World	124.2	5.1	58.6	1.9	84.0	2.2
Grand Total	2,418.9	100.0	3,038.3	100.0	3,777.8	100.0

Source: TIC and BOT (2004: 35)

The East African member states go the third with about 7.3 percent of FDI stock, mostly coming from Kenya. As far as the rest of Africa is concerned another African country with a significant stock of FDI in Tanzania is Ghana, with about 4.6 percent of total FDI stock. However, unlike other top African countries in terms of FDI in Tanzania, investment from Ghana is characterized by a single investment, i.e., Ashanti Goldfields. Note also that investment especially from Kenya and South Africa reflects investment overflows from other countries or multinational companies.

3.4 FDI Performance and its Implications

The Tanzania Investment Centre (TIC) has played a great role in the contribution and acceleration of FDI flow to Tanzania. TIC is the predecessor of the Investment Promotion Centre (IPC) that had performed as regulatory agency. Within a short period of time since its establishment in 1997 through Tanzania Investment Act, 1997, TIC has managed to transform itself to a modern investment facilitation centre that operates as an efficient one stop shop for investors. Through the TIC the government has managed to create an investor friendly environment that has greatly overcome many of the constraints that existed in the past years.

The government has implemented a number of proactive measures to facilitate the investments that foreign investors commit themselves in the country. These include the promotion efforts and investment incentives of foreign direct investors, reducing corruption and improving administrative efficiency, after-investment services and the provision of social amenities. The business environment for foreign investors has been improved through initiatives such as the reduction in bureaucratic “red tape” and state interference in private business, improvement in investment facilitation and the establishment of investment promotion agencies.

Since early 1990s the government invented a privatization programme that has acted as a contributing factor for increased foreign investors. The government's trade liberalization policy and relaxation of control over foreign exchange transactions was reinforced by legislative reform through the Public Corporations Act, 1992 (PCA), which aimed to promote the private sector in the economy as well as encourage Tanzanians to own businesses in privatized state-owned enterprises.

FDI in Tanzania has significantly played an important role in the contribution of capital formation. Using the official statistics, during 1999 and 2005, FDI averaged about 9 percent of GDP. Its contribution to the Gross Fixed Capital Formation (GFCF) averaged about 25.7 during the same period²⁸.

FDI can also transfer technology from developed countries to the host economy. Technology packages transferred by FDI generally may take the following forms:

- a) Technology-embodied products such as machinery, equipment and tools;
- b) Technical skills such as management and organizational expertise, marketing, quality control and other production related skills; and
- c) Process-related technologies.

²⁸Ibid., Honest P. Ngowi, 2002, p 8

Form (c) is very rare in Tanzania²⁹. According to the literature, there are four channels through which these packages of technology are transferred by FDI can be diffused in the host country³⁰. These include:

- i) FDI establishing linkages with domestic enterprises – as suppliers (backward linkage) or users (forward linkage).
- ii) Skills transfer through training, learning-by-doing, learning-by-interacting, and job-mobility,
- iii) Demonstration effects as local firms copy or adapt new technologies, market channels and management techniques introduced by foreign investors. This can take place in activities that involve processing or manufacturing and also services
- iv) Strategic technology partnership between a foreign investor and a domestic partner in areas such as R&D; and know-how, design and technical specifications and R&D capability.

There are a few Tanzanian companies which can provide a good example of how an FDI can benefit the economy by transferring new technology through backward linkage. With backward linkage mechanism for instance, the Tanzania Breweries Limited (TBL) initiated a comprehensive programme of local sourcing. In the context of this strategic development, Tanzania Breweries identified a number of inputs to the production of beer that could be sourced locally from the primary inputs to other intermediate inputs in the packaging process. It is approximated that Tanzania's Breweries sources about 30 percent of its barley requirement from domestic sources. For this purpose it has set up a malting plant in Moshi to systemize the purchase of

²⁹ Ibid. World Investment Report, UNCTAD, 2000, p: 9

³⁰“Investment Policy Review, The United Republic of Tanzania”, UNCTAD (<http://www.unctad.org/en/docs/poiteipcm9.en.pdf>), 13 April, 2009, UNCTAD/ITE/IPC/Misc 9, United Nations, Geneva-Switzerland, 2001, p: 17

barley 500 farmers in the region. In 2000, approximately US\$ 2.4 million were paid to from over farmers for the crop, representing the single largest source of direct income for farmers in the region. In the near future, TBL plans to meet the entire barley requirement from local sources (increasing from 6,000 to 26,000 tones) through further investment in research and development of the crop to improve yields and deepening of the present linkages with the farming community.

Other important backward linkages introduced by TBL are the sourcing of locally manufactured glass beer bottles. The supplier, KIOO Glass Ltd, has established close technical collaboration with TBL so as to meet production quality. Another supplier in Tanzania for TBL is Carnaud Metal Box (CMB), manufacturer of requirements metal crown corks. This supplier is also a long established foreign affiliate and was the first supplier to enter into a technical collaboration with TB after privatization in 1993. In addition, TB sources plastic crates and shrink-to-fit packaging from Simba Plastics and is currently sourcing some of its bottle label requirements from Tanzania Printers, a local printing company (labels). TBL has also established strong backward links with Shower Lux Ltd, manufacturer of industrial chemicals. Around 36 per cent of TBL's inputs are sourced locally through inheriting modern technologies and plans are underway to increase this percentage to 50 per cent in the next 3 to 5 years³¹.

A number of local firms led by TBL have benefited from the use of demonstration effects often related to competition which are channels of technology transfer occur when local firms copy or adapt new technologies, market channels and

³¹Brian Portelli, Rajneesh Narula, "Foreign Direct Investment Acquisitions and Implications for Technological Upgrading: Case Evidence from Tanzania", Research Memoranda 008, Maasricht, MERIT, 2004, p: 5

management techniques introduced by foreign investors³². This often happens to services and manufacturing companies. Companies with high market shares, such as the Tanzania Breweries, may lead to other small companies which do not want to lose business to be forced to copy these big companies' management and marketing techniques.

Tanzania Cigarette Company (TCC) is another company that gives a good example of the importance to human resource training and development. TCC believes that human capital component was vital in the achieving various goals of upgrading and benefiting from the modern technology transfer from the investor company. In the immediate aftermath of privatization, staff complement downsizing was undertaken.

TCC has put in place extensive internal and external training programs. Also being one of the main employers in the country seeks and retains the best young graduates in Tanzania, providing them with career advancement opportunities as well as external training and endorsement to other plants around the world. As a result TCC set up an on-site training centre late 1997 to spearhead this strategy. The initial post-privatization training mainly focused on generic training to enhance employee awareness of organizational change, professionalism and life skills. Substantial changes to the work ethic inherited from previous period were required. The continuing training initiatives therefore, kept employees informed that individual development needs and increase effectiveness, particularly of those employees at the production floor without basic skills but who were deemed to be trainable.

There other training programs that have been aimed at broadening managers' international influence in order to grab the regional market. For example, a system of amendment of TCC personnel to sister affiliates has picked momentum in recent years

³² M. Blomstrom, "Foreign Investment and Productive Efficiency: The Case of Mexico", *Journal of Industrial Economics*, Vol. 25, 1986, p: 2

and a number of local personnel from middle management upwards have already benefited. These training programs are emphasized for the development of senior management, i.e. supervisory and technical staff. A threshold level of capability for production floor workers was important as the company has been modernizing its plant and equipment. For example, suppliers provide training on specific machinery prior to commissioning so that when the actual machinery is installed in the Dar Es Salaam plant, it can be utilized immediately without undue work stoppages.

Table 3.4 Contribution of Some of the Privatized Firms to the Tax Revenue in Tanzania

Name of Company	Year of Privatization	Tax contribution	TSHS Million	Average % of Total Tax Revenue
TBL	1993	2001	30,052.10	3.20
		2002	45,065.50	4.30
		2003	58,665.80	4.80
TCC	1995	2001	11,445.80	1.20
		2002	15,781.30	1.50
		2003	24,443.20	2.00
CMB	2000	2001	412.60	0.00
		2002	815.80	0.10
		2003	1,210.80	0.10
TPC	1997	2001	3,445.10	0.40
		2002	4,083.20	0.40
		2003	6,217.10	0.50
THA	2000	2001	5,681.60	0.60
		2002	7,670.10	0.70
		2003	7,415.80	0.60
NBC(1997) LTD	1997	2001	4,217.30	0.50
		2002	5,797.40	0.60
		2003	6,506.40	0.50
CRDB	1997	2001	1,498.80	0.20
		2002	2,201.60	0.20
		2003	3,215.50	0.30

Source: TIC and Ulanga (2005)

Contribution to the government revenue is another important aspect for economic growth. Table 3.4 shows the contribution of some selected privatized industries to foreign investors and tax revenue collected between 2001 and 2003. According to the data available the privatized companies contributed about 6.7, 9.1 and 9.2 percent of total tax revenue in the 2001, 2002 and 2003 respectively.

Evidence of spillover effects played by FDI in Tanzania can be drawn from different sectors. However, this work focused on the mining sector as it is considered as a bridge linking the industry's gains with the rest of the people surrounding. Firstly, the Kahama Mining Corporation Ltd (KMCL) at Bulyanhulu made it possible for people living around the area to reap some social and economical benefits. KMCL for instance, initiated a USD 5.48 million housing loan scheme to construct modern houses at subsidized costs in Bulyanhulu ward. According to KMCL, the scheme will change the bad housing situation in the area. This scheme follows a water supply project through a 47km long pipeline and a 130km extension of the national grid from Shinyanga to the mine. The mine needs only a quarter of the 150 MVA per year. The rest is made available for the surrounding community's domestic and economic use. A USD3.4 million water project avails clean water throughout the day to over 30,000 people in the surrounding villages. According to KMCL, agricultural and small/micro business development, roads, schools and clinics have also received substantial attention and resources from the company.

The Ashanti Gold Mining Company (AGMC) on their side has also spent about 1.6 billion shillings for various development projects in Geita district, Mwanza region since it started operation in the area in 2000 and it continues to support health projects all over the country. It has financed the construction of water wells; the building of dispensaries, the rehabilitation of the designated district hospital, as well as building a dozen of classrooms in primary schools. Geita Gold Mine (GGM) has produced similar externalities to AGMC in Geita District.

3.5 FDI Promotion and Tanzania's Economic Growth

There are several policy challenges that offer sufficient or even necessary guidelines for developing countries wanting to attract FDI. There is a need for those countries in need of attracting FDI to make appropriate policies to make FDI work for development. This study reflects on these policy challenges for Tanzania in particular.

The following are policy challenges that can make FDI work for economic growth and social development³³. These policies include:

- Determine whether and how FDI fits in with economic growth and social development objectives
- Think in terms of quality, not quantity
- Prepare well
- Reduce conflict and corruption
- Provide appropriate infrastructure and appropriate skills
- Implement FDI policies consistently and actively
- Understand the pros and cons of international investment agreements
- Facilitate trade
- Provide a transparent and appropriate incentive and regulatory framework
- Promote linkages within available means

FDI is argued to be an important tool to boost economic growth but it is not the only solution to all development aspects; however, in order to find good, reasonable and permanent solutions to economic growth, it is important to realize that FDI is different

³³ Dirk Willem te Velde, "Government Policies for Inward Foreign Direct Investment in Developing Countries: Implications for Human Capital Formation and Income Inequality", Working Papers 193, OECD Development Centre, 2002, pp: 16-18

from external aid flows, local investment, or portfolio inflows. The existence of such differences requires that a country to examine how FDI fits in with development objectives. For instance, while FDI can lead to capital intensive projects that embody state-of-the-art technology with regards to the extraction of resources, FDI in the garments and textiles industry is likely to lead to employment intensive, but technologically less-advanced production processes. Tanzania has categorized various sectors for investment promotion into priority and lead sectors. It is therefore interesting to know whether there are no policy conflicts.

Tanzania is one of the countries which are marginalized' in the global economy in terms of FDI performance. There are various reasons why FDI share remains low in total, FDI flows should be of much concern to policy makers and should work for the benefit of the nation as a whole and not personal mater oriented. For instance, the stock of FDI (accumulated inflows), which is arguably a better measure of the 'port to new ideas and technologies' than flows, scaled by the market size is very small. Furthermore, the key is not quantity flowing in, but quality of FDI: what can FDI do for a country's development objectives is a quality aspect.

Despite of the policy failure the macro-evidence argued the association of FDI with faster economic growth in Tanzania, but it is not clear whether this is due to a composition effect, with foreign companies locating in high-value added sectors, or due to foreign companies transferring skills and superior techniques to a local economy, or both. Importantly, the existing evidence also suggests that the impact of FDI on economic growth is a process characterized by informational market failures requiring policy interventions. Competition, education or technology policy has been underway. It needs to be continued to raise the capacity of the local economy to absorb positive spillovers and mitigate negative aspects. A link clearly exists between FDI, trade and domestic policies.

It is straight forward that conflicts and corruption deter foreign investment. In general, Tanzania is a peaceful country but scores low. However, certainty in future operations is required for FDI in activities such as manufacturing and services. In particular, FDI in manufacturing (garments, assembly operations) can often choose between locations, and the ‘footloose’ investor is likely to choose a country with less corruption and conflict to avoid taking too much risk of which Tanzania would have taken a bigger step due to the location and condition in the country.

Corruption and conflict are important elements of political risk assessments, which in turn determine investor perceptions of the business climate in a country. With only limited available information, such perceptions are difficult to change and are sometimes applied to countries or regions with a good economic business climate in practice. With few natural resources and lots of corruption and conflict, countries may not appear on an investor’s shortlist. The government of Tanzania has made commendable efforts to promote good governance and fights against corruption, these efforts have been carried out at three levels:

- (i) Creation of Legal framework to promote good governance and fight against corruption;
- (ii) National Anti- Corruption Strategy and Action Plans (NACSAP); and
- (iii) Building coalition among stakeholders to combat the scourge and encouraging civil society to speak out.

Researches argue that infrastructure (good roads, airports and most of all ports) and education skills are important determinants of FDI. Surveys show that a low level of appropriate skills is one of the main barriers to investing in Tanzania and in Africa in general. In addition, if there is no proper infrastructure, investors have to build their own in order to produce, transport, sell or export their products. At the same time, infrastructure and skills help to absorb the positive effects from FDI. With a more skilled workforce and a better infrastructure (ports, roads water pipelines, electricity and

telecommunications), local firms can more easily capture knowledge spillovers, for instance through becoming local suppliers which is currently very low.

A simple change of law to allow foreigners' ownership in certain sector or industries (as it is now in the agricultural sector) may do little to attract foreign investors. If a country really wants to attract FDI, a change in law needs to be followed by a consistent and active implementation of a range of FDI policies. This involves the setting-up of an effective and aggressive Investment Promotion Agency (IPA) that targets particular firms and industries that fit in with the FDI strategy. There are concerns that many African IPAs are not the one-stop centers that investors like to see. Obtaining permits is difficult and takes a long time. African IPAs often lack the funds for consistent implementation of FDI promotion policy. Many also appear to lack a targeted and long-term focus that is required to attract investments (TNCs). Others do not have sufficient power to decide on relevant issues. In addition to a consistent implementation of FDI promotion efforts, it is important that government policy in other fields (e.g. policy related to education, technology, competition or privatization) be implemented consistently without engaging in policy reversals. Policy reversals often create an uncertain and business-unfriendly world.

3.5.1 International Investment Agreements in Eastern Africa

The past decade has experienced great changes in the international regulatory framework for FDI not only in Tanzania but also almost all Sub Sahara countries have signed Bilateral Investment Treaties (BITs) with other countries aimed at protecting and promoting FDI and clarifying the terms under which FDI can take place between partner countries. Table 3.5 shows a number of bilateral investment treaties that have been signed in the East African member states.

Table 3.5: Bilateral Investment Treaties and Double Taxation Treaties for East African member States (Cumulative Number)

	Kenya		Uganda		Tanzania	
	BITs	DTTs	BITs	DTTs	BITs	DTTs
1992	1	9	3	5	3	8
1993	1	9	3	5	3	8
1994	1	9	3	5	4	8
1995	1	9	4	5	4	9
1996	3	10	4	5	4	9
1997	3	11	5	5	5	9
1998	3	11	6	5	6	9
1999	3	11	6	6	7	9
2000	3	11	8	9	7	9
2001	4	11	9	9	10	9
2002	4	11	11	9	10	9

Source: Data from UNCTAD

International treaties provide destination countries with a bundle of advantages. Foreign investors are usually more trade intensive than local firms³⁴. Foreign investors may be associated with an organization that depend on capital goods imported from their parents' network, export natural resources overseas or may use cheap labor to produce competitive products for export. For these reasons, foreign firms are relatively sensitive to conditions that facilitate trade, i.e. ports, customs regulation, tariffs, and roads.

The government has offered various motivation schemes to attract investors, ranging from corporate tax holidays, exemptions for taxes and import/export duties, to

³⁴ Thiam Hee Ng, "Foreign Direct Investment and Productivity in Sub-Saharan Africa, Conference on Productivity and Growth in Africa and Asia", UNIDO, IDE-JETRO, 2007, p: 3

offering pure grants³⁵. TNCs in the natural resources industry hope to repatriate large sums of profits without paying taxes, and are sometimes prevented from disclosing taxes paid. However, tax experts indicate that many TNCs are interested in predictable tax regimes, especially in low-income country like Tanzania, rather than unpredictable tax rates, but corporate taxes should not be too high from a business perspective. On the other hand, government can improve the regulatory framework by removing unnecessary regulations (environmental regulations, may still be necessary)³⁶. There is still a wide difference in regulations between countries, and investor roadmaps show the extent to which some of these regulations are unnecessary.

An association between small and medium sized enterprises (SME) and TNCs can directly bring positive effects for SMEs through employment and indirectly through technology, skill transfer and access to export markets and finance. However, linkages in many African countries appear to be underdeveloped. Linkages in African countries can be underdeveloped for various reasons. Most TNCs in Africa locate in sectors with relatively low linkage possibilities (natural resources and textiles).

³⁵ Johan Dahl, "Incentives for Foreign Direct Investment: The Case of SADC in the 1990s", NEPRU Working Papers, No. 8, Windhoek, Namibia, 2002, p: 15

³⁶ Ibid. Honest P. Ngowi, 2002, p: 10

4 Modeling FDI and Economic Growth of Tanzania

4.1 The Balasubramanyam Model

The discussion in this section extends and formalizes the discussion in the previous chapters. The aim is to describe and model how FDI inflows improve the condition of economic growth of Tanzania. As stated earlier in chapter one this analysis relies on the work of Balasubramanya et al. to describe the effects of FDI and economic growth. Balasubramanyam et. Al, analysis concluded that FDI has positive relationship with GDP growth in the EP countries. The model used was derived from production function in which FDI was introduced as an input in addition to capital and labor. Export is also introduced as additional factor input. Export is included as an input parameter for three reasons³⁷:

- i) The neutrality of incentives associated with exports orientation is likely to lead, *ceteris paribus*, to higher factor productivity because of the exploitation of economies of scale, better utilization of capacity and lower capital-output ratios.
- ii) Exports are likely to alleviate serious foreign exchange constraints and can thereby provide greater access to international markets.
- iii) Exports like FDI are likely to result in a higher rate of technological innovation and dynamic learning from abroad.

Their econometric analysis and growth models are used as guidance in this work to test the effect of FDI inflow on the economy of Tanzania. It is argued that FDI is a prime source of human capital and new technologies. As a result, FDI can improve the

³⁷ Ibid. V.N. Balasubramanyam , M. Salisu, David Sapsford, 1996, p: 97

condition of economic growth through the size of physical capital and generation of technological effects.

4.1.1 Capital Formation and Technology Transfer

Foreign Direct Investment inflows are assumed to possess technology that is superior to the technology available to destination country firms. It is also argued that FDI contribute to the stock of human capital formation in the destination economy. In that context we analyze how capital formation and technology transfer to the host economy take place. FDI can impact the host country economy through two main channels namely technological spill-over and capital. Due to the difficulty of measuring the capital stock, the idea of approximating the growth rate of the capital stock by the share of investment on GDP³⁸, was used.

The total capital stock in the country consists of foreign and domestic owned capital stock. Hence the capital stock in the host country can be described as follows:

$$K_{HC} = K + F \quad (1)$$

Where K_{HC} , K , F are, respectively, total stock of capital in the host country, in our case Tanzania, domestic stock of capital and foreign owned stock of capital. When a MNE invests in the host country, FDI inflows would increase the existing host country's stock of capital through an increase in F . Similarly domestic investment has the same effect as FDI inflows since both increases the stock of physical capital in the host country. However, it is the relationship between FDI inflows and domestic investment that determines the fundamental effect on the capital stock.

The flow of technology to domestic firms can either be voluntarily or involuntarily depending on the available channels (reverse engineering or through

³⁸ Ibid, Balasubramanyam, et. al., 1996, p: 98

hiring of employees) of spill-over of technology between firms. Backward linkage (investors buy intermediate goods from domestic firms) and forward linkage³⁹ (investors sell intermediate goods to the domestic investors) are the most common transfers of technology used. TBL is a good example that allows the flow of technology voluntarily through backward linkage by buying intermediate goods from domestic firms.

Based on the earlier discussion about the importance of FDI on the transfer of technology, it is assumed that FDI inflow has more advanced technology compared to domestic firms. Therefore the level of technology can be modelled such that:

$$A_{FF} \succ A_{DF} \quad (2)$$

Where A_{FF} , is the level of technology owned by foreign firms and A_{DF} is the domestic firms owned level of technology. At time t of investment the foreign investment has consequently advantages over the domestic firms and the size of advantage can simply be represented as:

$$A_{FF,t} - A_{DF,t} \succ 0 \quad (3)$$

The size of the actual spill-over is determined by the size of the FDI owned technology advantage, the size of the technology leakage to domestic firms and domestic firm's absorptive capacity⁴⁰.

Thus putting together capital, labor and FDI the host aggregate country level production function can be constructed as follows;

³⁹ Beata S. Javorcik, "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers Through Backward Linkages", *The American Economic Review*, Vol., 94, No., 3, American Economic Association Publisher, 2004, p: 608

⁴⁰ Andreas Johnson, "The Effects of FDI Inflows on Host Country Economic Growth", Jonkoping International Business School, Sweden, 2005, p: 9

$$Y = F(K, L, FDI, X, t) \quad (4)$$

Where Y_{HC} , is the GDP growth, K , L , FDI and X are domestic capital stock, labor input, foreign direct investment net inflows and exports respectively. If we assume equation (4) to be linear in logs and put it in place we obtain:

$$\ln Y = \ln K + \ln L + \ln FDI + \ln X \quad (5)$$

Differentiating with respect to time and rearranging equation (5) we arrive at the following growth equation;

$$Y = \alpha + \beta_1 K + \beta_2 L + \beta_3 FDI + \beta_4 X \quad (6)$$

Where α , is a constant, $\beta_1, \beta_2, \beta_3$ and β_4 are output elasticity of capital, labor, foreign direct investment net inflows and exports respectively.

Due to the poor quality of data available we did not directly make use of equation (6), instead we developed two separate equations. The reason to do was the unreliable results attained after testing model (6) by using data available since 1970 to 2007. The first equation is FDI which was defined as a function of exports and exchange rates. Exchange rate is an additional variable taken into account due to its impact on FDI inflows. Capital was not included because it is assumed that FDI inflows bring in foreign capital then capital is defined by FDI net inflows.

FDI equation is therefore defined as follows;

$$FDI = F(X, XRAT, t) \quad (7)$$

Where FDI , is the foreign direct investment net inflow in million dollars, X and $XRAT$ are level of exports and exchange rates respectively. If we assume equation (7) to be linear in logs and put in place we obtain:

$$\ln FDI_i = \alpha + \beta_1 \ln X_i + \beta_2 \ln XRAT_i \quad (8)$$

After defining FDI equation we derive GDP equation in order to analyze the effect of FDI net inflows on GDP growth. The growth equation is therefore defined as follows;

$$GDP = F(FDI, L, t) \quad (9)$$

With an assumption that equation (9) is linear in logs, when put in place and follow the same procedure as above we rewrite the GDP equation as follows;

$$\ln GDP_i = \alpha + \beta_1 \ln FDI_i + \beta_2 \ln L_i \quad (10)$$

The GDP growth is now defined as function of FDI and labor force. The results for both equation (8) and (10) will be discussed and presented in the next section. After seen the detailed model approach applied in this work we will define and analyze the econometric approach and estimations.

4.2 Empirical Model and Estimations

The dataset that is used in this analysis covers the period 1970 and 2007. There are two dependent variables. The FDI net inflows are used as an independent variable which in turn is used as a dependent variable as we saw in the derivation of the growth equation. The annual growth rate of real GDP is used as independent variable and FDI is the primary variable of interest presented by FDI net inflows in million USD. Capital as explained earlier is accounted and defined by FDI and labor force variables are introduced in the model to take account of the effect of stock of physical capital on economic growth. Table 4.1 provides the detailed description of regression variables, the data source and the expected sign of the variable.

Table 4.1, Regression Variables

Name of Variable	Explanation	Data Source	Expected Sign
Dependent Variable			
GDP	Average annual growth of real GDP in Million Dollars	Bank of Tanzania (BOT) and Tanzania Investment Center (TIC)	N/A
Independent Variables			
FDI	FDI net inflows in Million Dollars	World Bank, Bank of Tanzania, Tanzania Investment Center from Tanzania Investment Report(2004)	+
L	Annual average percentage of total population	Penn World Table, ILO and World Bank: World development indicators	+
XRAT	The annual average of Nominal Exchange Rates	ILO and World Bank: World Development Indicators	-
X	The annual average flow of Exports	Penn World Table, Bank of Tanzania, Tanzania Investment Center and the World Bank: World development indicators	+

Source: BOT, ILO, TIC and WB

4.2.1 Empirical Estimations of FDI Inflows

By using the regression analysis techniques, equation (8) has been rewritten and one new variable was introduced. The moving average MA function was applied in order to get rid of the autocorrelation problem (autocorrelation is the correlation of a variable with itself over successive period of time). The moving average or rolling average is a type of finite impulse response filter used to analyze a set of data points by creating averages of different subsets of the full data set. An error term e_{t-1}^* was introduced to take account of the delays during the MA application.

Therefore equation (8) can be rewritten as:

$$\ln FDI_i = \alpha + \beta_1 \ln X_i + \beta_2 \ln XRAT_i + e_{i-1}^* \quad (11)$$

We will begin our empirical analysis of the relationship between FDI and economic growth by representing a graph of the actual, fitted and residuals of the regression for FDI during the year 1970 and 2007. The fitted values are the predicted values from the actual values of the regression. The predicted values can be either greater than or less than (or rarely equal to the actual values). Residual values are the estimates of experimental error obtained by subtracting the actual values from the predicted values.

Figure 4.1, Actual, fitted and residuals of the regression for FDI (1970 - 2007)

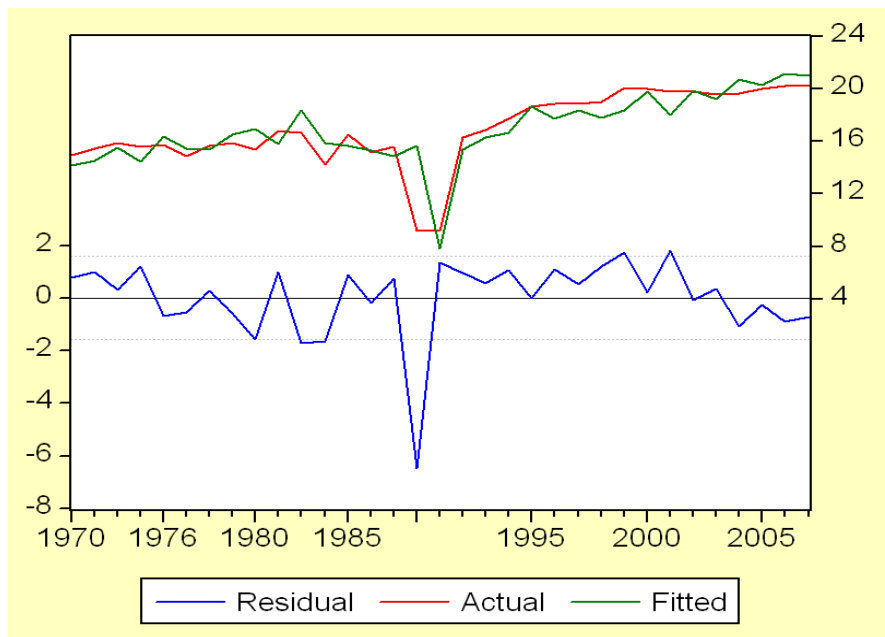


Figure 4.1 shows that there is some deviation in the FDI net inflows in the year 1990 and 1991, as it can be observed that there was a sharp decrease in the FDI net inflows. Technically it is difficult to explain the reasons for such sharp decrease but theoretically it could be due to the external forces that began in the year 1988 for

Tanzania to reform its political policies and engage herself into multi political party systems. This shows the great importance of political stability in order to attract FDI for the development of the nation.

The unit root test was carried and revealed that FDI net inflows had a unit root, as a result the null hypothesis was rejected (the null hypothesis is the hypothesis that there is no validity to the specific claim), which derived to the conclusion that the observations were non-stationary. Table 4.2 shows the results of co-integration tests which show that there could be in the FDI net inflow equation at most two meaningful equations with values 18 and 9 percent respectively. This implies that even though observations were non stationary in the long run, the co-integration test revealed that that they were co-integrated, thus providing a chance to apply the same model as presented by non-stationary equation (11).

Table 4.2, Unrestricted Cointegration Rank Test (Trace Statistics) for FDI

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None	0.318874	25.96072	35.01090	0.3293
At most 1	0.303560	14.05646	18.39771	0.1823
At most 2	0.087585	2.841459	3.841466	0.0919

Trace test indicates no cointegration at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Table 4.3 shows the results obtained when equation (11) was tested. The coefficients reveal that exports are positively correlated to FDI net inflows. The value 6.028453 reveals that an increase of 10 percent in exports will lead to an increase of

approximately 60 percent in FDI net inflows. As a result an increase of exports leads to the higher accumulations of FDI inflows. Exchange rates are negatively correlated, thus exchange rates are insignificant and respond negatively to FDI inflows as expected. Both exports and exchange rates are elastic to FDI inflows. Durbin Watson values were also in range; see Appendix A for a complete review of the ADF test statistics, critical values and the correlation matrix table.

Table 4.3, Time Series Regression Analysis for the Determinants of FDI net inflows, 1970-1993, (Annual Averages)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-94.9548	21.77429	-4.3609	0.0001
X	6.028453	1.199266	5.02679	0.0000
XRAT	-2.16805	0.59971	-3.6152	0.0011
MA(1)	0.958566	0.077538	12.3625	0.0000
R-squared	0.70716	Mean dependent var		16.9089
Adjusted R-squared	0.676866	S.D. dependent var		2.7833
Durbin-Watson stat	2.180492	Prob(F-statistic)		0.0000
Inverted MA Roots	-0.96			

4.2.2 Empirical Estimations of GDP

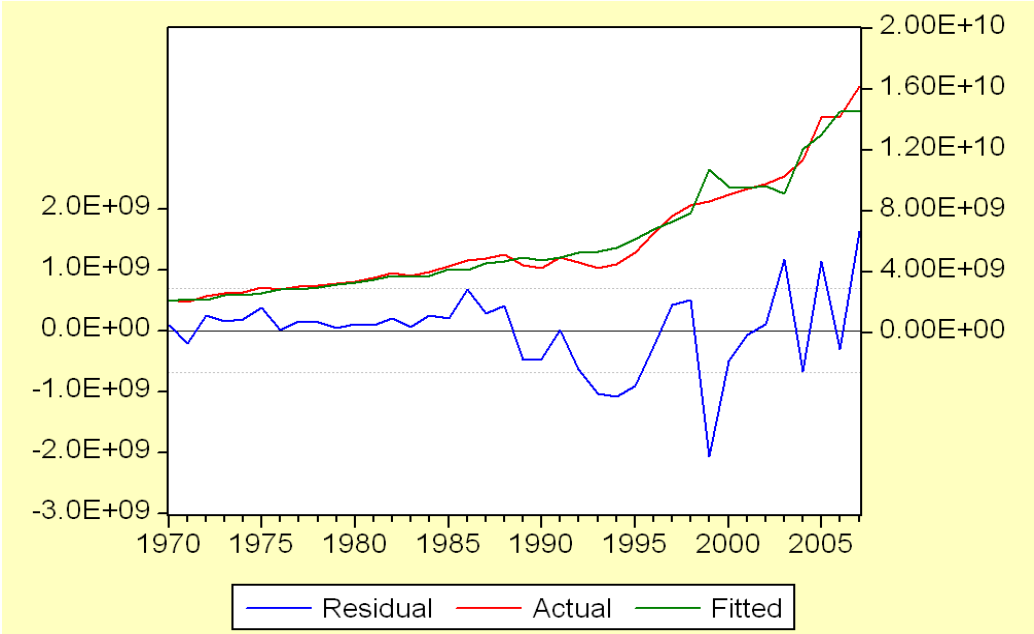
The derivation of an econometric relationship between FDI net inflows and the real GDP growth follows the same procedure as discussed above for FDI. GDP growth is the dependent variable and FDI is the key dependent variable. GDP is defined as a function of the net FDI inflows and labor force. However a new variable e_{t-1}^* is

introduced to take account of delays caused by the moving average function. Therefore equation (10) can be rewritten as follows;

$$\ln GDP_i = \alpha + \beta_1 \ln FDI_i + \beta_2 \ln L_i + e_{i-1}^* \tag{12}$$

The relationship between FDI and economic growth is the primary concern of this analysis. Figure 4.2 represents a graph of the actual, fitted and residuals of the regression for GDP during the same time period as seen previously. The figure also shows some deviation in the GDP growth in the year 1999. The figure below shows that the effects of the net FDI inflows on real GDP growth began to be realized from the year 1994. It is clear that an increase of FDI inflows from 1994 contributed much to the faster acceleration of GDP growth. Previous years reveal that FDI inflows had no or very little effect on GDP growth.

Figure 4.2 Actual, fitted and residuals of the regression for GDP (1970 - 2007)



The procedure followed to estimate results resembles that used in the estimation of the net FDI inflows. The unit root test revealed that GDP growth too had a unit root.

As a result the null hypothesis was also rejected, i.e., observations were non-stationary. As stated above, co-integration tests were applied for non stationary observations in order to find out whether the non-stationary equation (12) could be applied. Table 4.3 presents the results of co-integration test, there are at most two meaningful equations with values 11 and 63 percent respectively that could be applied in the estimation of GDP growth. These co-integration results revealed that even though equation (12) is non-stationary it is proved convenient for our analysis.

Table 4.4, Unrestricted Cointegration Rank Test (Trace Statistics) for GDP

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.513475	44.99279	42.91525	0.0305
At most 1	0.439656	22.65833	25.87211	0.1194
At most 2	0.140762	4.702974	12.51798	0.6394

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Table 4.5 presents the results obtained when equation (12) was tested. Exports are positively correlated to the stock of FDI inflow as expected. However the coefficient value of the net FDI inflows is 0.02850 which is lower than expected. The results show that labor force is highly correlated to GDP with the value of 0.9791, means that an increase of 10 percent in labor force will lead to approximately 9.8 percent increase in the real GDP growth level while net FDI inflows will cause the level of real GDP growth to rise with just 0.2 percent. Both FDI and labor force variables coefficients' values are below one; means that they are inelastic to the level of real GDP growth.

Table 4.5, Time Series Regression Analysis of Determinant of GDP Growth, 1970-1993, (Annual Averages)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.230.157	1.170.675	5.321.848	0.0000
FDI	0.028502	0.012221	2.332.303	0.0268
L	0.979165	0.078426	1.248.528	0.0000
MA(1)	0.673292	0.16265	4.139.523	0.0003
<hr/>				
R-squared	0.95981	Mean dependent var	2.237.418	
Adjusted R-squared	0.955653	S.D. dependent var	0.578784	
Durbin-Watson stat	1.504.275	Prob(F-statistic)	0.000000	

To sum up the specification tables above show the dependent variables used in the growth model and the results obtained. Both FDI net inflows and labor force respond positively to the level of real GDP growth. On the other hand in the estimation of the stock of FDI, exports and exchange rates were used as dependent variables in which exchange rates were proved to respond negatively to FDI net inflows while exports were shown to be positively correlated to net FDI inflows.

5 Conclusions

FDI can play an important role in promoting economic growth, raising a country's technological level, and creating new employment opportunities in Tanzania and developing countries as a whole. FDI can also work as a means of integrating developing countries into the global market and increase the capital available for investment, which will lead to increased economic growth needed to reduce poverty and raise living standards.

This work hypothesized that net FDI inflows are positively related to GDP growth. It is argued in the analysis that there are two main channels through which FDI can impact economic growth, namely, technological spill-over and capital formation. Our work discussed and modeled the effects of net FDI inflows on economic growth of Tanzania. We argued that FDI can be the strongest bridge to transfer technology from developed to developing countries. Thus technological spill-over provides the strongest potential for FDI to enhance economic growth. The domestic firms therefore are able to improve their level of technology and become more productive, as a result contribute more to economic growth.

The empirical analysis is carried out to find out whether FDI inflows enhance economic growth of Tanzania. The findings revealed the FDI inflows have a positive effect on the economic growth of Tanzania. The results presented in this work are based on the period covering 1970 – 2007. However, regarding the effect of FDI on GDP growth, results seem to mark two different regimes. The test results showed that the positive contribution of FDI inflows on GDP growth begun showing up in the year 1994. This implies that FDI is of crucial importance in Tanzanian economic growth, and that the structural transformation brought about by economic reforms from 1985 onwards contributed positively to this performance.

The discussion was also extended to the measures that the government of Tanzania has take to attract FDI. Trade and macroeconomic polices were adjusted in order to open doors for foreign firms to invest in Tanzania. The reforms and trade openness are argued to be important factors that led to significant change in attracting of FDI and hence result in positive effects on economic growth.

Suggestions for further research, relying on the results we achieved in this study it is with no doubt that there is a need to find out which type of investment FDI or domestic contributes more to the GDP growth. It is strongly advised to conduct analysis on the effects of domestic investments on GDP. The contribution of FDI inflows into key sectors of the economy is another subject of concern.

REFERENCES

Balasubramanyam V. N., Salisu M. and Sapsford D., **Foreign Direct Investment and Growth in EP and IS countries**, The Economic Journal, Vol., 106, No., 434, Blackwell Publishing for the Royal Economic Society, pp. 92-105, 1996.

Blomstrom M., **Foreign Investment and Productive Efficiency: The Case of Mexico**, Journal of Industrial Economics, Vol. 25, 1986, pp: 97-110.

Dahl Johan., **Incentives for Foreign Direct Investment: The Case of SADC in the 1990s**, NEPRU Working Papers, No. 8, Windhoek, Namibia, 2002.

Dollar D. and Kraay A., **Trade, Growth and Poverty**, The World Bank Policy Research Working Paper, No., 2615, (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=632684), 12 April, 2009, Development Research Group, Development Economic Group, The World Bank, USA, 2001.

Easterly W. and Levine R., **What have we learned from a decade of empirical research on growth? It is Factor Accumulation: Stylized Facts and Growth Models**, World Bank Economic Review, Vo., 15 No., 2, 2001, pp. 177-219.

GAPrg H. and Strobl E., **Multinational Companies and Productivity Spillovers: A Meta Analysis**, The Economic Journal, Vol. 111, no. 475, Blackwell Publishers for the Royal Economic Society, 2001, pp. 723-739.

Glass A. J. and Saggi K., **Foreign Direct Investment and the Nature of R&D**, The Canadian Journal of Economics, Vol. 32, No. 1, Blackwell Publishers on Behalf of Canadian Economics Association, 1999, pp. 92-117.

Greenaway D., Morgan and W., Wright P., **Trade Reforms, Adjustment and Growth: What does Evidence Tell Us?** The Economic Journal, Vol. 108, No. 450, Blackwell Publishing for the RES, 1998, pp. 1547-1561.

Griffith Rachel, **How Important is Business R&D for Economic Growth and Should the Government Subject it?**, The Institute for Fiscal Studies, Briefing Note No., 2, Published by the Institute of Fiscal Studies, London, UK, 2000.

Gujarati D., **Essentials of Econometrics**, Second Edition, McGraw-Hill Publishers, USA, 1992.

Headey D. D. Rao P. D. S. and Alauddin M. Hee Ng T., **Explaining Agricultural Productivity Levels and Growth: An International Perspective**, Feb. 2005.

Javorcik S. Beata, **Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers Through Backward Linkages**, The American Economic Review, Vol., 94, No., 3, American Economic Association Publisher, 2004, pp. 605-627.

Johnson A., **The Effects of FDI Inflows on Host Country Economic Growth**, Jonkoping International Business School, Sweden, 2005.

Kottaridi C. and Stengos T., **Foreign Direct Investment, Foreign Capital and Nonlinearities in Economic Growth**, University of Guelph, Canada and The Rimini Centre for Economic Analysis, Italy, 2008.

Maitena Duce, "Definitions of Foreign Direct Investment (FDI): A Methodological Note", Banko de Espana, International Economics and International Relations Department, 2000.

Mbelle A.V.Y., **Productivity Performance in Developing Countries, Country Case Studies: Tanzania,**

(http://www.unido.org/fileadmin/import/60400_05_Tanzaniarevised.pdf), 7 March, 2009, United Nations Industrial Development Organization (UNIDO), 2005.

Mlingi L. B. and Kessey Florian M., **Inventory of Free Trade (Export Processing Zone) in Tanzania, Tanzanian Occupational Health Services, Basis for Future Interventions,** WAHSA Project 3.7.1, Tanzania Occupational Health Services, Tanzania, 2006.

Msuya E., **The Impact of Foreign Direct Investment on Agricultural Productivity and Poverty Reduction in Tanzania,** MPRA No. 3671, Kyoto University-Japan, 2007.

Muniaguria M.E. and Singh N., **Foreign Technology, Spillovers and R&D Policy,** International Economic Review, Vol. 38, No. 2, Blackwell Publishers for the Economic Dept., Univ. of Pennsylvania and Institute of Social and Economic Research, Osaka University, 1997, pp. 405-430.

Narula R., **Multinational Firms, Regional Integration and Globalizing Markets: Implications for Developing Countries,** MERIT No 30 – Informatics Research Memorandum Series, Maastich, the Netherlands, 2001.

Ngowi, Honest P., **Can Africa Increase its Global Share of Foreign Direct Investment?** West Africa Review, 2001, pp. 23-39.

Ngowi, Honest P., **Foreign Direct Investment Entry Modes in Tanzania: Types, Driving Forces and Implications,** Tanzanet Journal, Vol., 3, No., 1, 2002, pp.1-12.

Portelli B., and Narula R., **Foreign Direct Investment Acquisitions and Implications for Technological Upgrading: Case Evidence from Tanzania,** Research Memoranda 008, Maasrticht, MERIT, 2004.

Teece D. J., **Technology Transfer by Multinational Firms: The Resource Cost of Transferring Technology Know-How**, the Economic Journal, Vol. 87, No. 346, Blackwell Publishers for the RES, 1977, pp. 242-261.

Türan T., **İktisadi Büyüme Teorisine Giriş**, İstanbul Üniversitesi, İktisat Fakültesi, İngilizce İktisat Bölümü, Yalın Yayıncılık, İstanbul, 2008.

Wagner Lucy, **A Challenge for Sub-Saharan Africa**; OECD Development Centre, Policy Insight No: 1, 2004.

Willem te Velde D., **Government Policies for Inward Foreign Direct Investment in Developing Countries: Implications for Human Capital Formation and Income Inequality**, Working Papers 193, OECD Development Centre, 2002.

OTHER REFERECES

“Tanzania Investment Report, BOT, NBS and TIC, ([http://www.tic.co.tz/TICWebSite.nsf/0/347185b7256c14ee432572d500370944/\\$FILE/Tanzania_Investment_Report_2004.pdf](http://www.tic.co.tz/TICWebSite.nsf/0/347185b7256c14ee432572d500370944/$FILE/Tanzania_Investment_Report_2004.pdf)) 21 June, 2009, 2004.

Household Budget Survey, Income Poverty and Inequality, National Bureau of Statistics (NBS) Tanzania (http://www.nbs.go.tz/HBS/Main_Report2007.htm), 23 March, 2009, 2007.

Classification of Economies by Income and Region, Global Economic Prospectus, WB (<http://siteresources.worldbank.org/INTRGEP2004/Resources/classification.pdf>), 17 April, 2009, 2003.

Tanzania Pilot Rural Investment Climate Assessment, Stimulating non-farm Micro-enterprise Growth, Sustainable Development Network (SDN), World Bank Report No. 40108-TZ. (<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTARD/0,,contentMDK:21424706~pagePK:148956~piPK:216618~theSitePK:336682,00.html>), Eastern Africa Country, Cluster 1, African Region, 2007.

World Investment Report, Cross-Border, Merges and Acquisition and Development, United Nations Conference on Trade and Development (UNCTAD), (http://www.unctad.org/en/docs/wir2000_en.pdf), 7 May, 2009, United Nations Publications, New York and Geneva, 2000.

Tanzania Investment Report, Report on the Study of Foreign Capital Flows in Mainland Tanzania, (http://www.bot-tz.org/Publications/TZInvestmentReports/TZ_Investment_Rept_Dec_2001.pdf), 17 Dec, 2008, BOT, TIC and NBS, 2001.

APPENDICES

Appendix A

Table A.1, presents the sample data that was used in the analysis. As it can be observed there are 34 sample data instead of 38. The reason is that years with negative values of the net FDI inflows were eliminated from our analysis due to the inconveniences they cause. GDP, FDI, L, X and XRAT respectively stand for real gross domestic product growth, foreign direct investment net inflows, labour force, flow of exports and nominal exchange rates.

Table A.1 Sample Data

Year	GDP	FDI	L	X	XRAT
1970	2,163,900,000	3,070,000	3,364,472	126,438,008	7
1971	2,000,643,970	5,150,000	3,628,238	136,894,305	7
1972	2,396,000,230	7,690,000	3,639,910	158,390,075	7
1973	2,597,500,245	6,030,000	3,984,920	145,327,599	7
1976	2,857,004,267	6,560,000	4,770,997	187,053,986	8
1977	3,006,975,533	2,940,000	5,104,198	214,006,483	8
1978	3,117,663,904	6,120,000	5,250,613	200,075,408	8
1979	3,216,895,436	8,020,000	5,641,699	217,500,736	8
1980	3,370,054,840	4,580,000	5,963,655	267,400,335	8
1981	3,593,629,004	18,920,000	6,207,147	259,587,989	8
1982	3,900,382,630	17,310,000	6,686,137	278,400,767	9
1983	3,760,922,639	1,520,000	6,866,622	300,755,587	11
1985	4,385,016,385	14,510,000	7,689,070	334,766,903	17
1988	5,100,405,760	3,760,000	8,977,354	400,004,539	99
1989	4,420,165,120	5,840,000	9,313,097	498,700,651	143
1990	4,258,740,992	10,000	9,663,020	553,636,329	195
1991	4,956,597,248	10,000	10,111,370	495,659,725	219
1992	4,601,414,656	12,169,639	10,201,832	552,169,759	298
1993	4,257,702,400	20,457,764	10,651,776	766,386,432	405
1994	4,510,845,952	50,000,895	11,073,737	947,277,650	510
1995	5,255,237,120	119,936,654	11,159,807	1,261,256,909	575
1996	6,496,158,720	150,066,382	11,801,511	1,299,231,744	580
1997	7,683,884,032	157,885,064	12,295,899	1,229,421,445	612
1998	8,382,544,896	172,306,245	12,912,086	1,257,381,734	665

1999	8,637,562,880	516,700,642	13,065,404	1,295,634,432	745
2000	9,079,262,208	463,401,000	13,377,037	1,543,474,575	800
2001	9,440,939,008	388,800,000	13,395,051	1,510,550,241	876
2002	9,758,057,472	387,600,000	13,431,531	1,658,869,770	967
2003	10,282,803,200	308,200,000	13,492,737	2,056,560,640	1,038
2004	11,351,427,072	330,600,000	18,752,620	2,497,313,956	1,089
2005	14,141,921,280	494,050,000	19,379,966	2,969,803,469	1,129
2006	14,178,109,440	596,950,000	19,538,393	3,119,184,077	1,252
2007	16,180,884,480	646,970,000	19,830,467	3,390,784,077	1,245

Table A.2 Sample Data (Logarithmic Values)

Year	GDP	FDI	L	X	XRAT
1970	21.50	14.94	15.03	18.66	1.97
1971	21.42	15.45	15.10	18.73	1.97
1972	21.60	15.86	15.11	18.88	1.97
1973	21.68	15.61	15.20	18.79	1.95
1976	21.77	15.70	15.38	19.05	2.13
1977	21.82	14.89	15.45	19.18	2.11
1978	21.86	15.63	15.47	19.11	2.04
1979	21.89	15.90	15.55	19.20	2.11
1980	21.94	15.34	15.60	19.40	2.10
1981	22.00	16.76	15.64	19.37	2.11
1982	22.08	16.67	15.72	19.44	2.23
1983	22.05	14.23	15.74	19.52	2.41
1985	22.20	16.49	15.86	19.63	2.86
1988	22.35	15.14	16.01	19.81	4.60
1989	22.21	15.58	16.05	20.03	4.97
1990	22.17	9.21	16.08	20.13	5.27
1991	22.32	9.21	16.13	20.02	5.39
1992	22.25	16.31	16.14	20.13	5.70
1993	22.17	16.83	16.18	20.46	6.00
1994	22.23	17.73	16.22	20.67	6.23
1995	22.38	18.60	16.23	20.96	6.35
1996	22.59	18.83	16.28	20.99	6.36
1997	22.76	18.88	16.32	20.93	6.42
1998	22.85	18.96	16.37	20.95	6.50

1999	22.88	20.06	16.39	20.98	6.61
2000	22.93	19.95	16.41	21.16	6.69
2001	22.97	19.78	16.41	21.14	6.78
2002	23.00	19.78	16.41	21.23	6.87
2003	23.05	19.55	16.42	21.44	6.95
2004	23.15	19.62	16.75	21.64	6.99
2005	23.37	20.02	16.78	21.81	7.03
2006	23.37	20.21	16.79	21.86	7.13
2007	23.51	20.29	16.80	21.94	7.13

Appendix B

Table B.1 Autocorrelation Matrix for real GDP growth

Sample: 1970 2007

Included observations: 38

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob	
. * .	. * .	1	0.093	0.093	0.3554	0.551
. ** .	. ** .	2	0.267	0.261	3.3660	0.186
. * .	. * .	3	-0.070	-0.122	3.5769	0.311
. * .	. .	4	0.101	0.052	4.0321	0.402
. ** .	. ** .	5	0.253	0.318	6.9742	0.223
. .	. * .	6	-0.011	-0.138	6.9799	0.323
. .	. * .	7	0.012	-0.136	6.9872	0.430
*** .	. ** .	8	-0.339	-0.268	12.798	0.119
. .	. .	9	-0.025	0.011	12.829	0.170
. .	. * .	10	0.009	0.146	12.834	0.233
. * .	. ** .	11	-0.114	-0.225	13.568	0.258
. * .	. * .	12	-0.160	-0.170	15.060	0.238
. ** .	. .	13	-0.269	0.053	19.472	0.109
. * .	. * .	14	-0.161	-0.140	21.123	0.099
. * .	. * .	15	-0.123	-0.160	22.120	0.105
. .	. .	16	-0.052	-0.004	22.304	0.134

Table B.2 Autocorrelation Matrix for the net FDI inflows.

Sample: 1970 2007

Included observations: 33

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob	
. * .	. * .	1	-0.098	-0.098	0.3487	0.555
. * .	. * .	2	0.087	0.078	0.6293	0.730
. .	. .	3	0.026	0.042	0.6549	0.884
. * .	. * .	4	0.069	0.070	0.8444	0.932
. * .	. * .	5	0.164	0.176	1.9593	0.855
. ** .	. ** .	6	-0.214	-0.203	3.9214	0.687
. * .	. .	7	0.093	0.027	4.3087	0.744
. * .	. * .	8	-0.148	-0.134	5.3205	0.723
. ** .	. ** .	9	-0.203	-0.274	7.3047	0.605
. .	. .	10	-0.019	-0.038	7.3222	0.695
. * .	. * .	11	-0.172	-0.103	8.8715	0.634
. * .	. ** .	12	-0.122	-0.203	9.6941	0.643
. * .	. * .	13	-0.166	-0.081	11.284	0.587
. .	. .	14	-0.021	-0.016	11.311	0.661
. * .	. * .	15	-0.112	-0.187	12.113	0.670
. .	. * .	16	0.029	0.091	12.169	0.732

Appendix C

Table C.1 Correlation Matrix for GDP Equation

	GDP	FDI	L
GDP	1.000000	0.676122	0.953681
FDI	0.676122	1.000000	0.565562
L	0.953681	0.565562	1.000000

Table C.2 Correlation Matrix for FDI Equation

	FDI	XRAT	X
FDI	1.000000	0.553940	0.671773
XRAT	0.553940	1.000000	0.953681
X	0.671773	0.953681	1.000000