THE DETERMINANTS OF FOREIGN DIRECT INVESTMENT IN KENYA (1970-1999)

By

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C50/7244/2001

A research project submitted in partial fulfillment of the requirements for the degree of

Master of Arts Degree In Economics of

Kenyatta University, Department of Economics

AUGUST 2003
DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

Signature ___________________________ Date 17-10-2003

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This research project has been presented for examination with our approval as university supervisors.

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Signature ___________________________ Date 21st October, 2003
DEDICATION

This project is dedicated to both of my parents, Charles Muthoga Karagu and faith Wanjiku Muthoga, whose love and support have meant more than words could possibly express. They have remained strong, relentless and consistent to their commitment in encouraging me towards the achievement of formal education.
ACKNOWLEDGEMENT

Much appreciation and praise goes to the lord God Almighty for his provision of peace, will and support throughout my studies and more so for fulfilling the desires of my heart in the completed project. May the all glory, honor and adoration be wholly unto him.

I am deeply indebted to all those who have contributed differently to the completion of this research work. Most of all to my two supervisors Mr. Kuuya and Mrs. Okeri who have incessantly provided guidance, concrete criticism and inspiration to make this research exercise a success.

I am equally grateful to the entire staff of Economics department, Kenyatta University for their comments, criticisms and encouragement that served to shed more light and balance to what is now my completed project. Special thanks goes to my fellow course mates, Macharia, Mambo, Manyasa, Masika, Muniu, Oduor, Oriaro and Wainaina, for being there for me during the entire period of my studies and especially for their contribution towards the refinement of my project. My friends cannot go unmentioned due to their immeasurable support, morally and otherwise, in this long course of struggle. To Mercy, Maina and Gitahi, just to mention a few, thanks for being there for me in times of joy and adversity.

My deep gratitude goes to my parents for their encouragement and availing the resources that saw me complete my studies. To my sisters Wanjiru, Muthoni, Njambi, Sarah and my brother Kuria, I appreciate your patience and understanding throughout my entire course.
Finally, I am grateful to Justus for his unrelenting assistance without which this study would not have taken ground. May God bless you abundantly for allowing me to use your computer and most of all for the printing of my research work.

However, any shortcomings and errors within this paper remain my responsibility.
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FOREIGN DIRECT INVESTMENT forms one of the most important links between developing and industrial countries and increasingly among developing countries. Like trade, it provides an important channel for global integration and technology transfer. Kenya faces a big challenge in attracting and sustaining foreign direct investment at levels that allow domestic investment to take advantage of benefits associated with capital inflows. The study therefore sought to conduct an empirical investigation on the determinants of foreign direct investment in Kenya.

The theoretical framework is based on the concept of institutional FDI fitness theory, developed by Saskia Wilhelms. The study used data over 1967-1999 period, partly because after independence (1963), marked the beginning of the development process. The results were interpreted based on the generalized least square model (GLS).

The estimated linear regression model revealed that, economic openness is the most significant determinant of foreign direct investment inflows in Kenya. Other variables that were significant determinant of FDI inflows included growth rate of GDP, credit availability from the monetary authority, domestic investment, the exchange rate and internal rate of return. The rest of the remaining variables in the estimated model were statistically insignificant. These include: external debt; inflation rate; trade balance; university enrolment rate and gross domestic savings. The implication of all these findings is that ensuring the promotion and sustainability of Foreign Direct Investment, as a tool that enhances Kenya’s economic growth is a formidable challenge to policy makers now and the years to come.
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1.1 Background
In the post-world war II period, international trade and capital flows have grown more rapidly than world output and as a result, the degree of interdependence of the world economy has increased markedly. Foreign direct investment (FDI) has gone hand in hand with internalization of a growing number of markets (Dunning and Naruia, 1996). FDI has made an important contribution to the promotion of exports. Although Kenya is one of the more industrialized countries in eastern and central Africa, the rate and pattern of FDI inflows in the last two decades has not been satisfactory (UN, 1998).

Among the factors that exert influence on international economic relations, foreign direct investment (FDI) has become increasingly important (International Finance Corporation 1970). This is illustrated by much faster growth of FDI compared to the growth of both world trade and output; the intensifying efforts of virtually all countries to attract FDI including the industries previously barred to foreign investors; and by increasing number of global strategies of transnational corporations, (UN, 1991).

A direct investment implies a permanent relationship between the investor and the object, and particularly the opportunity for real influence over the object’s operation. Investments that do not fit this description are classified as portfolio investments. (UN, 1998).

The aim of FDI is to acquire a lasting interest in an enterprise operating in an economy other than that of the investor, the investor’s purpose being to have an effective voice in the management of the enterprise. Such investment involves the initial transactions between the two entities and all subsequent transactions between them and among foreign affiliates, both incorporated and
unincorporated. An individual or a corporation or a joint venture between foreign and local investors can own the foreign investment.

There are three components of FDI; equity capital, reinvested earnings, and intercompany loans. Equity capital is the foreign direct investor’s purchase of shares of an enterprise in any country other than its own. Reinvested earnings comprise the direct investors share (in proportion to direct equity participation) of earnings not distributed as dividends by affiliates or earnings not remitted to the direct investor. Such retained earnings by affiliates are reinvested. Intercompany loans or debt refer to short or long-term borrowing and lending of funds between direct investors (parent enterprise) and affiliate enterprises (UN, 1998). Reference is also made to reinvestment defined to include any increase of foreign holding in an existing investment either through reinvested earning or through inflow of new capital.

1.1.1 The Importance of FDI

FDI can affect the economic, social and political development of host countries in many dimensions. FDI forms one of the most important link between developing and industrial countries and increasingly among developing countries. Like trade it provides an important channel for global integration and technology transfer. FDI can promote technological changes in developing countries in a number of ways. It can have direct impact through its contribution to higher factor productivity, changes in product and research development. It can also have an indirect impact through collaboration with local research and development institutions and technology transfer to local downstream and upstream producers. This can also happen through the effects on presence of foreign affiliates’ technology on composition of production and efficiency of local producers (UN, 1993).
There is growing evidence of economic spillovers from FDI inflow, such as transfer of managerial and technological expertise to the host countries. However, in highly distorted private sectors, FDI may simply transfer monopolistic profits to foreign multinationals corporations (Pitchford, 1995). FDI is not only linked to growth in trade; it can also promote export orientation in host countries. The success that developing countries have recorded with export-oriented policies has resulted in spurring their own economic growth (UN 1992). FDI can bring substantial gains to recipient’s economies by contributing to physical capital formation and human capital development. An increase in FDI leads to a corresponding increase in private domestic investment. It has been shown empirically that 1% rise in FDI increases domestic investment by between 0.5% to 1.3% (World Bank, 2000).

FDI immediately adds to the stock of capital, technology and/or other imported inputs in the host country. Furthermore, FDI inflows are accompanied by transfer of foreign transnational corporations’ (TNCS), intangible assets, such as managerial skills, which are embodied in the project asset that enable foreign TNC’S to stay competitive relative to other host countries firms in the latter’s own backyard. They are therefore likely to result in new capital formation, both physical and human capital. Just as with capital accumulation, FDI immediately creates new jobs (assuming again the absence of credible domestic investment). The tax base is likely to expand more favorably due to FDI for the very reason that new business units are created as additional taxable entities. Foreign investment is said to fill the gap between targeted governmental tax revenues and locally raised taxes. By taxing foreign corporations’ profits and participating financially in their local operations, LDC’s governments are thought to be better able to mobilize public financial resources for development projects.
FDI also creates structural diversification to a host country. Hence FDI is desirable wholly since it may bring new assets (e.g. industrial skills and knowledge) in new fields, thereby contributing to industrial diversification in that local market. Market competition is desirable because it simulates and improves efficiency, resulting in lower prices for consumers. FDI can enhance local competition if its superior assets /market power is harnessed in such way as to prevent predatory practices and to attract competitors. It also brings welcomed liquidity, whether in form of foreign exchange at the national level or in the forms of needed funds at the company level. Liquidity is usually a priority for any country that experiences a balance of payment crises and is in dire need of foreign exchange. In general, FDI improves the overall productivity of a country. Infact a study of 69 developing countries done by Bornstein and Gregoria in 1995 found that FDI stimulates economic growth and has a larger impact than domestic investment. The study also found that far from crowding out domestic investment, FDI seems to supplement it (Bornstein, et al, 1995).

1.1.2 Foreign Direct Investment in Africa.
Africa’s share of world FDI is extremely low. It was mere US$ 5.5 billion in 1996, representing only 1.5 % of the global foreign direct investment flow. The distribution of this flow is extremely skewed, with the main recipient being Nigeria, Egypt, Morocco, South Africa, Algeria, Angola, Ghana, and Cote d’Ivore which accounted over 67% of FDI in Africa,( Geda,2001). The main source countries were France, UK, Germany and USA while the favorite sectors were oil, gas, metals and other extractive industries. A comparison of FDI between 1998 and 1990 by Kimenyi and Wambua, (2001) showed that Zambia and Zimbabwe experienced a sharp decline in FDI, while it increased in Uganda, Nigeria, Morocco, Angola and Botswana. However the rise in FDI flow in the latter countries was not very substantial when viewed in terms of volume of FDI that went to other developing countries outside Africa such as China. In the 1980s the performance of
FDI in Africa had stagnated as capital went to safer and/or high return yielding places. In general by the second half of the 1990s, the average share of FDI in gross domestic product (GDP) in Africa was not only very small but was also declining.

1.1.3 Trends Of FDI In Kenya Since 1967

Analysis of Kenya’s FDI flows is detailed in the table below.

Table 1.0 FDI INFLOWS AS A PROPORTION OF GDP, 1967-1999 (%)

<table>
<thead>
<tr>
<th>YRS</th>
<th>67</th>
<th>68</th>
<th>69</th>
<th>70</th>
<th>71</th>
<th>72</th>
<th>73</th>
<th>74</th>
<th>75</th>
<th>76</th>
<th>77</th>
<th>78</th>
<th>79</th>
<th>80</th>
<th>81</th>
<th>82</th>
<th>83</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI (%)</td>
<td>0.93</td>
<td>1.5</td>
<td>1.1</td>
<td>0.86</td>
<td>0.69</td>
<td>0</td>
<td>0</td>
<td>0.48</td>
<td>1.2</td>
<td>1.2</td>
<td>0.64</td>
<td>0</td>
<td>1.1</td>
<td>0.12</td>
<td>0.05</td>
<td>0.15</td>
<td></td>
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<table>
<thead>
<tr>
<th>YRS</th>
<th>84</th>
<th>85</th>
<th>86</th>
<th>87</th>
<th>88</th>
<th>89</th>
<th>90</th>
<th>91</th>
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<th>96</th>
<th>97</th>
<th>98</th>
<th>99</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI (%)</td>
<td>0.06</td>
<td>0.2</td>
<td>0.38</td>
<td>0.4</td>
<td>0.12</td>
<td>0.63</td>
<td>0.27</td>
<td>0.23</td>
<td>0.07</td>
<td>0.03</td>
<td>0.06</td>
<td>0.36</td>
<td>0.14</td>
<td>0.38</td>
<td>0.35</td>
<td>0.39</td>
<td></td>
</tr>
</tbody>
</table>

Source 1: African Development Indicators- Various issues

Table 1.1 FDI IN KENYA: INWARD FLOWS, 1967-1999 (MILLIONS OF DOLLARS)

<table>
<thead>
<tr>
<th>YRS</th>
<th>67</th>
<th>68</th>
<th>69</th>
<th>70</th>
<th>71</th>
<th>72</th>
<th>73</th>
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<th>80</th>
<th>81</th>
<th>82</th>
<th>83</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI (MS)</td>
<td>11.5</td>
<td>19.8</td>
<td>15.5</td>
<td>13.8</td>
<td>12.4</td>
<td>0</td>
<td>0</td>
<td>15.8</td>
<td>42</td>
<td>53.9</td>
<td>32</td>
<td>0</td>
<td>77.9</td>
<td>8.3</td>
<td>3.4</td>
<td>9.2</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>YRS</th>
<th>84</th>
<th>85</th>
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<th>88</th>
<th>89</th>
<th>90</th>
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<th>96</th>
<th>97</th>
<th>98</th>
<th>99</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI (MS)</td>
<td>3.9</td>
<td>12.7</td>
<td>27.7</td>
<td>31.5</td>
<td>9.3</td>
<td>52.4</td>
<td>22.8</td>
<td>18.9</td>
<td>6</td>
<td>1.5</td>
<td>4</td>
<td>33</td>
<td>13</td>
<td>40</td>
<td>40</td>
<td>42</td>
<td></td>
</tr>
</tbody>
</table>

Source 2: UNCTAD (2000), Handbook of International Trade and Development Statistics
From the data in Table 1.1, it is evident that Kenya has experienced sharp fluctuations in FDI over the years. Between 1991 and 1994, for instance, Kenya experienced sharp reductions in FDI while in the years 1972 –1974 and 1979, it recorded none. There were some improvements in 1995 when FDI rose to US$ 33 millions from previous years US$4 millions. However this increase was not sustained because in 1996, FDI fell to US 13 millions.

1.1.4 Policies on Investment Promotion in Kenya
Investment promotion is defined to include market and policy initiatives through which the government tries to attract FDI. Investment promotion includes the following types of activities: advertising, direct mailing, investment seminars, investment missions, participation in trade shows and exhibition, distribution of literature, one to one direct marketing efforts, preparation of itineraries for visits of prospective investors, matching prospective local partner’s, acquiring permits and approvals from various government department, preparing project proposal, conducting feasibility studies and providing services to the investors after projects have been operational (UN,1990).
Policies designed to attract FDI have various aims: to increase the quantity of foreign investment directly, to increase the quantity of foreign investment indirectly by for instance improvement of investment image. Increasing the number of firms competing to invest in a project can also do this. Research has shown that an increase in the number of firms competing to invest in a project is likely to lead to improvements in terms and conditions of the agreement negotiated by a host government because of resultant increase in the bargaining power of a host government (IFC, 1990). The example of East Asian countries and increasingly Latin America demonstrate what host countries stand to gain on using promotion as a tool for attracting FDI (Klavens, 1995).

The government has adopted and implemented various macroeconomic reforms in order to promote investment. As outlined in various Sessional papers, the most comprehensive one being Sessional Paper No 10 of 1965 on African Socialism, government emphasis was on the promotion of the increased role of the private sector in economic growth. In 1986, the government of Kenya established the Investment Promotion Centre (IPC). This is a primary contact for companies and entrepreneurs both local and foreign, which provides an investment opportunity linkage centre. Its main role is to encourage investment in Kenya through information dissemination campaign. The following is a summary of current policy incentives that are contained in the Kenya investors’ guide, as published by the investment promotion centre (IPC), (IPC, 2001).

1. Investment Allowance

This is provided as an incentive for investment in the manufacturing and hotel sectors at the rate of 100% for the period July 2000 to December 2001, 85% for 2002, 70% for 2003, and 60% for 2004 countrywide. This means that when the investors import equipment’s for investments in hotel and manufacturing sectors they will have the respective tax exemptions
of the stated percentages up the year 2004. In addition eligible capital expenditures have been expanded to include certain infrastructure and environmental protection equipment related to manufacturing activity.

2. Depreciation

(i) Liberal rates are allowed for depreciation of assets based on book value per annum as follows:

**Buildings**

<table>
<thead>
<tr>
<th></th>
<th>Rate</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial buildings</td>
<td>2.5%</td>
<td>(straight line)</td>
</tr>
<tr>
<td>Hotels</td>
<td>4.0%</td>
<td>(straight line)</td>
</tr>
</tbody>
</table>

**Machinery**

<table>
<thead>
<tr>
<th></th>
<th>Rate</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tractors, combine harvesters, Earth-moving equipment, and Similar vehicles</td>
<td>37.5%</td>
<td>(declining balance)</td>
</tr>
<tr>
<td>Including aircraft</td>
<td>25.0%</td>
<td>(declining balance)</td>
</tr>
<tr>
<td>All other machinery, including ships</td>
<td>12.5%</td>
<td>(declining balance)</td>
</tr>
<tr>
<td>Computer and other office equipment</td>
<td>33.3%</td>
<td>(declining balance)</td>
</tr>
</tbody>
</table>

(ii) Loss carried forward: business enterprises that suffer loss can carry forward such losses to be offset against future taxable profits.

(iii) (a) Remission from custom duties: duties on capital goods, plant and machinery are at the rate of up to 5%. (b) Large scale private investments projects whose expenditure on productive physical assets are in excess of US$5 million within a two year period, and that will generate net economic benefits for the country, can recover the value of import duties paid on imported capital goods for the project against income tax liability.
3 Export promotion programs

Duty remission facility: materials imported for use in manufacture for export; or production of duty free items for sale domestically, are eligible for duty remission.

4 Manufacture under bond:
To encourage manufacturing for exports to the world market the government has established centres for manufacturing under bond, which are open to both local and foreign investors. Enterprises operating under the programme are offered the following incentives:
(i) Exemption from duty and VAT on imported plant, machinery, equipment, raw materials and other imported inputs, 100% investment allowance on plant, machinery, equipment, and buildings.
(ii) Export processing zones (EPZ) programs: the government encourages their operation. They enjoy the following benefits:
(a) 10 years tax holiday, and thereafter flat 25% tax for 10 years,
(b) Exemption from all withholding taxes on dividends and other payments to non-residents during the first 10 years;
(c) Exemption from import duties on machinery, raw materials and intermediate inputs;
(d) No restrictions on management or technical arrangements;
(e) Exemption from stamp duty;
(f) Exemption from VAT; and,
(g) Operate under one license only.
1.1.5 Other Programmes that encourage Foreign Direct Investment.

Measures aimed at market liberalization have been put in place. These include: abolishing import and export licensing; rationalizing and reducing import tariffs; abolishing price controls, privatizing and restructuring loss making public enterprises. In general the government is reducing its participation in direct production. On the other hand highest potential market for Kenya’s manufacturing exports is the neighboring countries. An important development in this area is transformation of preferential trade area (PTA) into Common Market for East and Southern Africa (COMESA), with a population of over 300 million. Of added importance is the launch of East African Community (EAC) with headquarters in Arusha, Tanzania.

The government has also revitalized the investment climate by liberalizing exchange control, by allowing floating the shilling exchange rate to be market driven, abolishing import licensing and opening the capital market for foreign participation. All existing legislation pertaining to investment has been consolidated in one legal document (the Investment code) to clearly regulate the legal rights and obligation for both foreign and local investors. The investor’s code provides legal guarantees for all investors.

Other promotional programmes that have been put in place include the efforts of Kenya International Agricultural shows in Nairobi, Mombasa, Nakuru, and Eldoret, now turned into trade fairs. The initiative is to lobby and advertise Kenyan investment environment to the locals and foreigners. This is an additional promotional tool to attract the inflow of foreign direct investment. The government of Kenya in collaboration with private business organises annual trade exhibitions at the Sarit Center in Nairobi to advertise Kenyan flowers which are now one of the country’s major foreign exchange earners. Similarly the Jua Kali sector also receives a boost from such exhibitions held at the Kenyatta international conference centre (KICC) annually.
1.1.6 A Foresight of the Determinants of FDI

Foreign investors, for a long time Kenya's reliable allies in economic development, are now shunning the country for safer places. Recent studies on foreign investment in East Africa paint a gloomy picture for Kenya (Kimuyu, 1997). The studies blame the country’s problem with investors on a chain of self-inflicted political and economic blunders since 1970’s, which gave birth to serious problems that continue to ravage the economy today. It is the genesis of economic stagnation, which the government now concedes has thrust half of the population of nearly 30 million into a life of misery below poverty line. The first casualty of these errors was foreign investment. The study done by (IFC, 1992) blamed the widespread economic collapse in Kenya on the much-touted fall of international coffee prices in the 1970’s, the collapse of the East African community in 1977, and the oil crises of 1973 and 1979.

However there were a more local, self-inflicted causes of the damage that has been less highlighted in economic literature. It has long been argued that there is a great correlation between the economic and the political stability of a country and the flow of investments. Kenya suffered a negative image after the attempted coup of 1982, which was masterminded by Kenya Air Force servicemen. The image of tranquil and that of Kenya being a one-stop investment centre was gone, with the self-styled leaders proclaiming they had seized power. Unfortunately, even after the plotters were crushed within hours of their declaration, the government mounted no public relations offensive to repair the country’s tattered image. Instead a panicky government committed yet another mistake, legally establishing a single party state the same year. The country that had been a de facto one party state was after a motion passed in parliament in one afternoon, turned to a de jure single party dictatorship. Jitters and tension set off a financial crisis that saw many locally owned banks collapse between 1985 and 1986. This scared the investors the more.
The report by the technical group on integration the foreign aid embargo in the 1990’s as another event that scared away existing and would be investors. Just as the country struggled to cope, politically instigated violence broke out in parts of the Rift Valley, Nyanza and Western Provinces, not to mention the land clashes which hit the coast, with a dramatic raid by gangsters on Likoni police station, Mombasa, in the run-up to the 1997 general election, in which several officers were killed and firearms stolen. Eventually security became a major concern as Kenya’s image got more tarnished (Wambua, 2001).

Facing a do or die battle in the multi-party elections of 1992, following the amendment of the constitution to allow the registration of other parties after two decades, the Kanu government threw away monetary discipline, causing inflationary pressure on the economy. The rate of inflation reached more than 60% by 1994. Mismanagement of this magnitude combined with a series of financial scandals ended up paralyzing the flow of new investment. The terrorism attacks and threats that are directed at countries allied to or are pro United States policies have also contributed to much uncertainty that further explain why foreign investment in Kenya has hit unprecedented low levels recently. The tragic bomb blast that targeted Israeli tourists at the coast and the earlier bombing of the American Embassy in Nairobi illustrate the fact. Other factors affect the inflow of FDI, wages and the interest rates are potentially important in the explanation of movement of capital in the globe. The cost of wages and salaries tend to be relatively higher in Kenya as compared to other developing countries in the Asian continent, which are also eager to attract FDI. This could partly explain Kenya’s poor performance the field of foreign direct investment. However all these factors identified have not been empirically tested and subjected to a systematic analysis. This study will therefore seek to bridge this gap.
1.2 Statement of the Research Problem
The erratic trend in growth of foreign direct investment that has been observed since the 1970’s has occurred during a period in which various macroeconomic reforms aimed at promoting FDI inflows have been adopted and implemented by the government. The key economic policy reforms that have been undertaken with a view to promote investment by the domestic and foreign investors include: promotional incentives outlined in 1.1.4 above; abolishing import and export licensing; rationalizing and reducing import tariffs; liberalization of foreign exchange and price controls; partial liberalization of capital market among other measures. Despite the fact that considerable amount of resources have been spent on efforts to implement these government policies, programs and in establishing institutions, all of which are aimed at increasing the rate of FDI in Kenya, these have not resulted in increased FDI inflows.

Though policy makers /planners readily recognize the problem of insufficient FDI inflows and its worrisome effects on the economy and while the public are exposed to its deleterious impacts on a day to day basis, what is still unclear, however, are the underlying causes behind this scenario. There is little empirical research that has been done to establish why this is the case in Kenya and not say South Korea during the 1970s and 1980s when she was subject to similar experiences. By analyzing the factors that have actually contributed to the erratic and in most cases declining foreign direct investment inflow rate, this study forms part of the pioneer steps in reversing this trend.

In view of the above, the following research question may be posed

i. What are the determinants of FDI inflows in Kenya?

ii. What are the relative effects of the factors identified in (I) above?

iii. What policy measures are required to augment the current government efforts to promote FDI?
1.3 Objectives of the Study
The general objective of the study is to determine the factors that affect Foreign Direct Investment in Kenya.

The specific objectives of the study are to:

(i) Identify the factors that determine the inflow of FDI in Kenya.
(ii) Measure the relative effects of the factors identified in (i) above, and
(iii) Suggest policy recommendation in light of (ii) above

1.4 Significance of the Study
A study of the determinants of FDI inflows is important for various reasons. First it gives empirical and theoretical insights into factors, which determines the level of investment in a country. To be consistent with national development objectives it is important to forge a consensus on investment policy reform and implementation. The result of the study can Serve as a source of information for designing and implementing sovereign national Policies to this end.

Of great use is the study to the foreign investor already in business or in point of making investment decision. In addition, information on factors affecting foreign direct investment is useful to policy makers in assessing the appropriateness of the existing promotional programmes. Lastly the study will add to the existing body of knowledge on determinants of foreign direct investment inflows in the region and hence act as a reference material for those interested in conducting further research in the area.
1.5 Scope and Justification of the Study
The focus of the study is to investigate the factors that affect foreign direct investment in Kenya over 1970-1999 period. The choice of this range is supported by the fact it is from early 1970s that FDI flows to Kenya started to decline. Secondly, it is during this period that various macroeconomics reforms and programmes have been implemented to promote Foreign Direct Investment.
2.1 Theoretical Literature
The rich literature on FDI flows, causes, and effects suggest that the applicable theories lend themselves to organization into four schools: the two traditional schools of development thinking, the dependency and modernization schools and the integrative school and the electric theory.

2.1.1 Dependency School.
It flourished between the 1950’s and 1970’s, and seeks to achieve more equal wealth, income and power distribution through self – reliant and collective action of developing nations. Dependency school’s major contribution to the FDI field is its focus on the consequences of FDI in developing nations. This school explain the causes of underdevelopment and dependency as: developing countries are exploited through international trade which leads to deteriorating terms of trade, or through multinational corporations transferring profits out of the developing economies (Prebisch, 1950; Rodney, 1972; Samir Amin, 1976).

The solution offered by dependency theorists for underdevelopment encompasses various strategies of closing developing countries to international investment and trade. However today it is widely accepted that foreign direct investment is indispensable with economic growth and development, and hence dependency theories are no longer fashionable and accepted as state doctrine.
2.1.2 Modernization School
It was developed before the dependency school. Modernization theorist proclaims that there is a natural order through which countries ascend to what is seen as higher development stages. The modernization school viewed FDI as a prerequisite and catalyst for sustainable growth and development. For FDI to fulfill its role, economies have to be freed from distorting state interventions and opened to foreign investment and trade (Wilhelms, 1998).

The perfect market approach of modernization school rests on both neoclassical and perfect market theories. Early neoclassical theories explain international capital flows with differential rates of returns across countries that lead to capital arbitrage, with capital seeking highest rate of return (Brecher, 1983). Capital arbitrage theories however do not explain why private investment takes the form of FDI and the theories empirical testing has not produced clear results (Mireri, 2000). Given that perfect market theories oversimplify reality, the market theory was elaborated upon by taking into account structural distortions or rigidities, which hinder an economy and thus prevent the society from taking full advantage of FDI (Helleiner 1989).

The imperfect market approach consists of industrial organization theory, the theory of the firm and internationalization theory. This is based on the tenets that FDI usually occur in oligopolies (Kojima, 1978). Hence firms choose an investment location based on its comparative advantage after accounting for friction arising from transportation costs and trade barriers. The theory of the firm examines factors that influence a firm’s choice of FDI instruments ranging from risk, to market size (MacDougall, 1960).

2.1.3 Integrative School
This study integrates micro, meso, and macro economic variables that determine FDI. The macro-level envelops the entire economy, the micro level denotes the firms, and the meso level represent institution linking the two, for example government agencies issuing investment
policies to enterprises (World Bank, 1994). The range of FDI determining factors according to this school include over – regulation coexistent with a variance between written and operational codes, rent seeking, underdeveloped capital markets, and financial intermediation; excessive state ownership; poor infrastructure and lack of education and skill building opportunities (World Bank, 1996).

2.1.4 Dunning's Electric Theory
The theory considers the nature of a country ‘s involvement in international relations by analyzing two types of involvement. The first involvement is concerned with economic activities taking place within the boundaries, and thus using national resources, but concerning goods and services directed to foreign market. The second involvement is concerned with activities of national economic agents using resources located in various countries to produce goods and services for foreign market. Dunning (1980) argues that the first involvement falls within the conventional international trade theory. The second involvement falls within the domain of international production and FDI. He further argues that the two are part of the same process. He asserts that in terms of a country’s involvement, one has to explain why and when foreign markets are sourced through FDI and international production rather than production and exports. This approach is an attempt to analyze why and where decisions in terms of ownership, locational and internalization advantages (known as OLI advantages). The essence of electric approach is in considering those advantages altogether and in applying them to both international trade and production. Ownership advantages (O) are specific to a particular enterprise (such as technology, marketing and production skills). If this advantage is exploited optimally, a firm can overcome and can be compensated for additional costs of establishing production facilities abroad. This advantage also gives the firm the ability for additional costs of establishing production facilities abroad. This advantage also gives the firm the ability to overcome competition from local firms,
which are operating in a familiar environment. Locational advantage (L) are specific to countries likely to attract foreign investors. Under these factors such as large markets, government policies, the country’s trade policy and superior infrastructure are included. Finally the firm gets greater benefits by exploiting both ownership and locational advantages by internalization (I). Firms do internalization due to the fact that markets for assets and product such as technology and knowledge are imperfect. The O and I are specific to a particular firm but the L advantage is specific to the host country and has a crucial influence on a host country’s inflow of FDI. The advantages must occur jointly for FDI to occur.

Dunning (1993) divides foreign production into four major categories based on why international firms decide to invest abroad. They include the resource seeker, market seeker, efficiency seeker and strategic asset seeker. The first two represent motives for initial entry while the last two explain the reasons for expansion.

Resource Seeking Investment

The main reason for this type of FDI is to make multinational enterprise (MNE) more profitable and competitive. Hence such enterprises are prompted to invest abroad in order to acquire a particular and specific resource at a lower real cost than it would have in it’s home country. There are three types of resource seeking investors. The first type point out that the primary producer and manufacturing enterprises engage in FDI for motives of cost minimization and security of supply of resources they include minerals, agricultural products and locational bound resources such as tourism. Secondly a resource seeker may comprise of investor who is in search of a large supply of cheap and well-motivated unskilled and semiskilled labour. This particular FDI is very popular in manufacturing sector is normally export oriented. Export Processing Zones (EPZ) are set up to encourage such investment. The last group of the resource seeker is
prompted by the need of firms to acquire technological capabilities, management and marketing expertise and organizational skills.

Market Seeking Investment
This investment is undertaken either to sustain or protect existing markets. The market could have been previously serviced by exports by foreign firms but high tariff imposition or large size of market will justify local production. There are four reasons why such investment is undertaken. The first could be because the investor's suppliers and customers have set up producing facilities abroad. There could also be a need for products to be adopted to local tastes and to indigenous resources and capabilities. Another reason for servicing a local market could be that the production and transaction costs could be lower than supplying the particular product at a distance. Goods that are relatively costly to transport but can be produced economically in small quantities are more likely to be located near the consumers. The last and increasingly important reason is that MNES may consider it important as part of it's global and market strategy to be located in the leading markets served by international competitors.

Efficiency Seeking Investment
The efficiency seeking investor is interested in a rationalized structure of established resources; based in such a way that they gain from common governance of geographically dispersed activities. Such benefits are associated with economies of scale and the risk of diversification that result from cross border product or product specialization, the learning experience from producing in different countries and the opportunities of arbitraging cost and price differentials across the exchanges. Issues like competence and capabilities, local competition, availability of
supporting industries and the macro and micro policies adopted by the government play a significant role.

Strategic Asset Seeking Investment

This group of foreign investors engages in FDI by acquiring assets of foreign corporations to promote their long-term strategic objectives of sustaining and advancing their international competitiveness. The motive for strategic asset seeking investment is basically to add to the firm’s existing portfolio of assets.

According to the world Bank (2000) the most important short term determinants of FDI include: changes in host country’s exchange rate, changes in asset prices, growth prospect and economic environment in FDI source countries (world bank, 2000, p. 54). In the long run the most important determinants of FDI include: natural endowments, policy environments, supply of human and physical capital, infrastructure, access to intermediate or final goods market. It is important to note that unlike portfolio flows which are subject to financial shocks and therefore very volatile, FDI flows are not volatile since they involve large, fixed, and illiquid investments, which make disinvestments very difficult. FDI is likely to take place if a foreign country offers more profitable opportunities relative to home countries. The potential for higher returns must be emphasized as a major driving force because foreign investors are not motivated by charity but by expected returns. The returns are in turn influenced by a host of factors, for instance, political stability, macroeconomic stability, and the cost of doing business.

The cost of doing business is determined by infrastructure (roads, energy, etc), licensing procedures, taxes, quality and cost of labour and other essential inputs. Assuming everything else
the same, investors will favour those countries where cost is relatively lower as opposed to high cost ones. Another factor that influence FDI is the World Trading Organization (WTO) rules. Much of FDI in some countries was encouraged by protectionist policies that were in place. With the current reforms towards free trade, foreign investors need not shift their investment from home countries as they can sell freely from their home bases. However, there is evidence that free international trade is not necessarily a barrier to FDI because some countries with liberal trade policies continue to attract substantial FDI.

2.2 Empirical Literature

Geda (2001) conducted a study on determinants of FDI in Africa. It was noted that in order to understand why FDI flows are small the determinants of FDI be examined empirically and theoretically. It was revealed that in general, relative market size, mining activity and historical pattern of FDI affect FDI inflow in Africa. It was added that much of the preconditions for sustained inflow of FDI to Africa rely on the structural transformation of the African economies resource discovery and enabling conditions for high levels of growth. An observation was made that in the medium and long-term, bringing structural change in the economy can be achieved by growth enhancing and enabling policies.

Anyanwu (1998) carried out an investigation on the macroeconomic determinants of FDI inflows in Nigeria, between 1973 and 1996, by selecting variables from both theoretical and empirical literature that he believed were suitable to Nigeria’s situation.

The adopted model, which used co integration and error correction analysis, is

\[ \text{NFDI} = f(\text{INVGDP}, \text{GDP}, \text{OPEN}, \text{EXR}, \text{AVTR}, \text{SAP}, \text{INDIG}, \text{COUP}) \]
Where NFDI is the net Foreign Direct Investment in Nigeria, INVGDP is the ratio of domestic investment to Gross Domestic Product, GDP is the Gross Domestic Product, OPEN is the openness of the economy measured by ratio of trade to GDP, EXR is the exchange rate of the Naira to Us dollar, AVTR is the average tax rate, SAP is the structural adjustment programme dummy, INDG is a dummy variable to capture indegenisation policy adopted in Nigeria during the period of study. COUP is the number of coup d’etat. The coup variable was included to capture political upsets that occurred in Nigeria during the period of study. The INDG reflect a period in Nigeria where FDI was seen as a tool of political and economic domination by the government and hence policies adopted were to discourage rather than promote FDI in Nigeria. Results in the study that the investments GDP ratio, GDP, and indegenisation dummy had their theoretically predicted signs and were statistically significant. Therefore in the short run as FDI increased the domestic investment rose. An increase in GDP resulted in higher FDI while indegenisation policy significantly reduced net FDI inflows. A wider scope in the openness of the economy significantly reduced net FDI inflows to Nigeria, as liberalization of Nigeria’s trade policy led to an outflow of FDI in form of dividend remittances and capital flight. Both the average tax rate and Naira exchange rate to US dollar insignificantly affected Nigeria’s FDI flow.

International Finance Corporation, IFC, (1992) conducted a study on FDI performance in sub Saharan Africa. It was observed that market size is one of the most important considerations in making investment location decisions. Potential investors also look at levels of FDI as a very important indicator of quality of business climate. Another essential and motivating factor that was identified is the quality of infrastructure. It was noted that the relative ease of doing business depends upon the availability and efficiency of transport, communication and energy. More broadly, the degree of industrialization attained in the host country is an important determinant of FDI location especially for the more technical industries such as electronics.
According to a study done by Kimuyu (1997), the main factors that affect investment were found to be policies that reduce volatility of investment and corporate taxes. The study also indicated the dependence of investment on trade policies and terms of trade. Their analysis showed that key macroeconomic and policy variables determine FDI such as domestic credit, the exchange rate, foreign exchange reserves, public investment and public debt. The impact of these variables was shown to differ in magnitude and sign. However the results suggested that taken together, the variables explain a significant amount of fluctuation in the level of FDI inflows in Kenya.

Obwana (2001) empirically investigated the determinants of FDI in Uganda and found three factors to be very critical in attracting FDI: the macroeconomic environment, political stability and policy consistency. Other factors that determine FDI in Uganda are infrastructure and institutional bottlenecks. The implication therefore is that no matter what the government does (privatization, generous incentives through tax holidays, tax exemptions), failure to tackle the factors outlined above will lead to less FDI flows. The equation that was specified is illustrated below;

$$\text{FDI} = a_1 + a_2GDPGR + a_3GDP + a_4TB + a_5INF + a_6PPEGDP + a_7DSR + a_8EDSGDP + U$$

Where FDI is Foreign Direct Investment; GDPGR is a proxy for return on capital GDP is the Gross Domestic Product measured output of the economy in real terms; TB is the trade balance measured as sum of exports and imports as a percentage of GDP; INF is the inflation rate measured as the change in consumer price index of some basket of goods; PPEGDP is the proportion of public expenditure to GDP; DSR is the domestic saving rate; EDSGDP is the external debt service as a proportion of GDP and U is the error term. GDP variable is included in the FDI equation because the value of GDP reflects the size of an economy, which facilitates
efficient utilization of resources via scale economies. Investors must be concerned with the size of market because this shows the potential for local sales.

The assumption is that FDI will tend to flow as the size of the market expands. Practically speaking, economies that have high GDP are more likely to have other requisite conditions that favor investments, for example, an excellent infrastructure. GDPGR is a proxy for return on capital. The use of GDPGR is justified with the argument that economies that are fast growing do provide many opportunities to make profit than slow growing economies. It is assumed that the higher the rate of return will lead to more are FDI flows. The trade balance variable is incorporated with the argument that the countries that face pervasive trade deficits will tend to put in place policies that are pro-FDI to correct the situation. Inflation is a proxy for macroeconomic instability. EDSGDP proxies the structure of the economy and other adverse effects of high debt service while PPEGDP captures the size of the government.

The study identified both positive and negative factors that influence private investment in Uganda. Investors are attracted to invest in the country because of prospects of high growth, low inflation and liberalized exchange rate and fiscal prudence. The negative points are Uganda’s landlocked position, dilapidated infrastructure, anti-FDI history, low labour productivity and high tax on fuel (Obwana, 2001p.57). The main concerns for investors are political stability and policy credibility. Other concerns relate to: market size (proxied by GDP per capita or population size), market growth proxied by GDP growth rate at constant prices), natural resource availability, quality of infrastructure and labour (cost, productivity, and skills). The results showed a negative correlation between FDI and trade balance implying that as the trade balance worsens, a country will be more determined to put in place policies to attract FDI. High inflation was also found to have negative effect on FDI as this show macroeconomic stability.
Fielding (1993), carried a study, which sought to determine whether foreign direct investment is determined by the rate of return to capital or by other political or economic factors in Kenya and Cote d'Ivore. The study achieved its results by the use of a model which was tested empirically and tested and improved accordingly. The factors that were cited include the saving rate of the economy (S), foreign aid (AID), and the level of foreign exchange (FOREX). It was observed that FDI will depend on the foreign exchange availability and it was the saving which would adjust in the long run to the equilibrium.

Investors who are not foreign exchange constrained will face a financial constraint of $S + AID$ less investment by forex constrained investor, which amount to constraint to total investment. The study also noted that with perfect capital market, the short run determinant of investment will be those determining its rate of return and with uncertain returns, the accompanying risk. Movement of various factors between Capitals intensive and non capital-intensive activities is likely to affect the return to investment. The example which was cited argued that labour if shifted away from a highly capital intensive sector and into one which uses negligible capital, because of a relative price change, then the aggregate marginal physical product of capital will fall, which may reduce investment. In this case, it will not simply be the aggregate output price, which matters, but the price of capital-intensive output relative to that of other output. The model was also extended to test whether the volume of Concessional loans has any impact on FDI. Concessional loans make up an important part of foreign investment finance for many developing countries. These are loans tied to particular investment projects made at low interest rates, as part of foreign aid packages of donor countries.

$$FDI = F(S, FOREX, AID, IRR)$$
The level of income (GDP) of a country was also observed to be a factor that affects FDI. It shows the level of financial openness of an economy. The reason being that people will be consuming and saving constant fraction of their income:

$$S = F(\text{INC})$$

2.3 Overview of the Literature
Most of the studies undertaken are based on perfect market economy theories, which stem from free trade theories. They assume perfect competition where all participants are price takers – no monopolies or oligopolies – enjoying unhindered market entry and exit. They therefore oversimplify reality like in ignoring rigidities or distortion in the market, which hinder an economy and thus prevent the society taking full advantage of FDI.

The study done by Geda (2001) ignored so many factors, which include the political stability of a country. In addition, fears of domination through foreign capital continue to be expressed in complex regulations, rent seeking, and lagging implementation of investment reforms.

The study done by Kimuyu (1997), majored on various macroeconomic policies. What he failed to capture is the fact that most of these policies are tied to some conditions favoring some countries. This may affect most developing nations adversely if implemented.

The study conducted by the Fielding (1993), has enumerated various factors that affect FDI, however, this study relied on the assumption of perfect capital market and no uncertainty, conditions unlikely to be fulfilled in the countries looked at. Nevertheless, if the private agents do offset some of the current budget deficits/surplus, then the above model (equation 2.3) may work well.
Understanding the weaknesses of these studies is of great importance since the study will seek to improve on them.
3.1 Theoretical Formulation
The theoretical formulation is based on the concept of institutional FDI fitness, developed by Wilhelm’s (1998). Grounded in the integrative theories of FDI, this term refer to a country’s ability to attract, absorb, and retain FDI. Fitness theory states that FDI is determined by less intransigent fundamentals than by institutional variables more amenable to change namely policies, laws and their interpretation.

An illusion of Darwinian concept of the survival of the fittest suggest that it is not the necessarily the biggest and the strongest who survive, but rather those who adapts most cleverly fittingly to existing conditions. The four institutions contributing to FDI fitness are government, markets, education and social culture. This can be represented in the form

\[ FDI = F(G, M, E, S) \]  

(3.1)

The acronym FDI represents the dependent variable foreign direct investment. The four capital letters denote the four explanatory variable of FDI fitness. G stands for government fitness, M for markets fitness, E for educational fitness and S for social cultural fitness.

3.1.1 First Explanatory Concept: Government Fitness
In applying the government fitness concept to the legislative branch of government, high level of government fitness means that the legislative decision and lawmaking process are transparent, efficient and reasonably democratic. The economic openness (ECOP) of the country proxied by import and export barriers, i.e, free markets, an exchange rate that reflect a currency ‘s true value, and the rating of the country in terms of corruption measure this concept. Equation (2) portrays this phenomenon clearly;
Where ECOP represent the economic openness of a country and CORRI stands for international disk guides variables indicating legal and administrative impartiality and transparency.

3.1.2 Second Explanatory Concept: Market Fitness
High market fitness means that domestic and international markets for goods, services and capital are developed and linked to one another. This concept is measured by the following variables:
Gross Domestic Product (GDP) per capita which indicate economic development, total population, (POP), which indicate the market size, urban population, (Mpop), indicating urbanization, Rural population Density, (Mden) which indicate rural infrastructure and linkages.
Foreign trade as a percentage of GDP (TV, which indicate trade balance, a positive trade balance indicates that many goods are being imported and exported, domestic credit provided by the banking sector, (CRED), this will indicate credit availability and financial intermediation.

Algebraically this can be illustrated as;
M = f (GDP, POP, TB, CRED, TXREV)  \( \vdots \)

GDP stands for gross domestic product, POP is the total population in the economy indicating market size, TB is the trade volume, CRED represents the domestic credit provided by the banking sector, While TXREV is the tax revenue in the private sector.

3.1.3 THIRD EXPLANATORY CONCEPT: EDUCATIONAL FITNESS
High educational fitness means that a country’s workforce is internationally competitive in terms of education and productivity. It is expected that high educational fitness increase FDI inflows. This explanatory concept is measured by university school enrollment (percent of gross enrollment), URS, indicating higher education.
3.1.4 Fourth Explanatory Concept: Social Cultural Fitness

High social cultural fitness means that a country is flexible and open to FDI and international markets trends, it adapts to developments and business practices in the global market place. It is measured by a regional dummy variable indicating regional social culture (SSD). This captures local altitudes and behaviours affecting incoming FDI.

\[ S = f(\text{SSD}) \]  

3.2 Model Specification

The study sought to investigate the factors that affect the inflow of foreign direct investment. In specifying the econometric model evidence suggested in the literature review and general information from the economic theory was utilized. Since policy efforts to attract FDI have met with differing success in Kenya, this study analyzed what account for these differences in FDI inflows.

The basic determinants of FDI are the size of the economy, growth of the economy, and the level of exchange rate, domestic credit provided by the banking sector, foreign trade, domestic saving rate, return on capital, inflation, university school enrollment rate, external debt service, and economic openness. The basic form of the model of FDI inflows is a modified form of equation one with inclusion of other important variables. The modified form of the model is therefore given as:

\[ \text{FDI} = F(\text{INV, G, S, EDT, XRT, ECOP, TV, INF, CRED, IRR, URS}) \]  

FDI denotes Foreign Direct Investment inflows.
INV represent the domestic investment
G represents Growth in GDP
S represents the rate of saving.
EDT stands for external debt service.
XRt is the exchange rate.
ECOP stands for economic openness.
TV denotes the trade balance
INF is the inflation rate.
CRED represent the domestic credit provided by the banking sector (percentage of GDP).
IRR indicate the rate of return
URS primary school enrollment rate (percentage of gross enrollment)

The linear model is specified as

$$\text{FDI} = a_0 + a_1\text{INV} + a_2\text{G} + a_3\text{S} + a_4\text{EDT} + a_5\text{XR}_t + a_6\text{ECOP} + a_7\text{TV} + a_8\text{INF} + a_9\text{CRED} + a_{10}\text{IRR} + a_{11}\text{URS} + e$$

Where,

\(a_1's = 0, 1, \ldots, 12\) are parameters to be estimated.

\(e = \text{error term}\)
3.3 Definitions and Measurement of Variables

(i) Foreign Direct Investment (FDI). It is the inflows of investment to acquire a lasting management interest (10% or more voting power) in an enterprise operating in an economy other that of the investor. It was captured as a percentage of GDP.

(ii) Domestic Investment (Inv). This is the investment undertaken by individuals in a country. It indicates the general investment climate in a country. It was measured as a percentage of GDP.

(iii) Rate of saving (S). This is the proportion of GDP that is saved in a year.

(iv) External debts (EDT). This is the amount of money borrowed by the government from other countries. It was measured by the value of long term and short-term borrowing as a proportion of GDP.

(v) Exchange rate (XR) t. It is the price of a unit of one nation’s currency in terms of a unit of a foreign currency. It was measured by annual average of the official market exchange rate in national currency per us dollar.

(vi) Economic openness (ECOP). This indicate how a country is has appreciated the free market mechanism, free flow of exports and import. Trade as a percentage of GDP captured this variable.

(vii) Trade balance (TV). It is the difference between exports and imports of goods and services, measured as a percentage of GDP.

(viii) Inflation (INF). Inflation is the general increase in price level; it is captured by the Kenya consumer price index (CPI), which measures price changes on a designated basket of basic goods and services.

(ix) Domestic credit provided by the banking sector (CRED). It includes all credit to various sectors on gross basis, with the exception of credit to the central bank, which is net. It is measured as a percentage of GDP.
(x) The rate of return (IRR). This is the opportunity cost of the amount of money set aside for investment. It is measured by the real interest rate of government treasury bills.

(xi) University school enrollment rate (URS). It is the rate of change of number of students of official school age enrolled in the university in consecutive years expressed on percentage basis.

(Xii) Growth rate Of GDP (G). It is the proportionate change in the economic development of a country expressed as a percentage over the years.

3.4 Estimation Technique
Regression analysis was employed and hence collaborated the institutional FDI fitness theory. The Generalized least square was used in the estimation of the model. The results from the study were used to test for the hypotheses of the study. This concept was tested in an econometric time series data in the sampled (period which range from 1967 to 1999).

The data collected was analyzed by use of computer packages specifically Eviews. Time series data may give spurious results, if OLS is conducted without asserting its trend and unit root characteristics. Spurious regression occur when at least one variable in the regression is non-stationary in the sense that it display a distinct trend and in this case is also likely that the independent variable will also display a similar trend. Due to this trend, we are likely to obtain a significant regression coefficient and high coefficient of determination but a low Durbin Watson statistic, even though such variables are not related. A variable is said to be stationary if it’s mean and variance are constant over time and value of the covariance between two time periods depend only on the distance or lag between the two variables and not on the actual time the covariance is computed. A variable is non-stationary if one of the above conditions is not met.
Therefore, there was need for the refinement of the data collected. This therefore led to conducting various diagnostic tests using recent development in econometrics and application of the necessary corrections thereof.

3.5 Data Type and Source
Secondary data was used in the study. The variables and data were selected from World Bank development indicators (various issues), international financial statistics, Central Bureau of Statistics (CBS) publications (various issues of the economic surveys and statistical abstracts). These books were available from different libraries, for instance, Central Bureau of Statistics. Data was extracted from annual reviews journals produced by the ministry of trade.

3.6 Limitation of the study
A number of social and political factors, such as corruption and governance, policy consistency and the degree of administrative efficiency that are very vital in determining FDI inflows have been excluded from the model. This can be explained by the fact that most of these factors are qualitative in nature and hence cannot be quantified and where perception indexes existed (like corruption perception index) they would have to reduce the sample size because they were available for only the last five years.
CHAPTER FOUR

ANALYSIS AND THE INTERPRETATION OF THE RESULTS

4.0 Introduction
This chapter presents the results of all econometric tests conducted by the study as well as regression results. The estimation of the model and other diagnostic tests are done using Eviews econometric software. The unit root tests are conducted in order to identify the time series characteristics of the variables and finally the generalised least squares model is constructed. Because of the nature of the data, log linear model could not be estimated.

4.1 Unit Root Tests

Table 4.0: DF and ADF unit root tests results with trend and Intercept

<table>
<thead>
<tr>
<th>Variable</th>
<th>ADF statistics</th>
<th>Order of integration</th>
<th>Lags</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td>-3.489</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CRED</td>
<td>-4.9775</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ECOP</td>
<td>-7.2321</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>URS</td>
<td>-4.1358</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IRR</td>
<td>-4.6398</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>INF</td>
<td>-5.6087</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>INV</td>
<td>-4.6994</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>XRT</td>
<td>-9.4871</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>TV</td>
<td>-6.225</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>EDT</td>
<td>8.399</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>S</td>
<td>-3.71</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>G</td>
<td>-6.4134</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

The critical value for ADF: 5 percent = -0.80, the results were reported at 5 percent level of significance. The third column (order of integration) shows the level at which the variables were stationary, that is, 0, 1 and 2 means that the variables are stationary at levels, first difference and second difference respectively.
The reported unit root results indicate that variables FDI, CRED, URS, IRR, S, and G are stationary and therefore of integrated order zero. The other variables were non-stationary and hence were differenced respectively to achieve stationarity.

Table 4.1: DF and ADF unit root tests results with Intercept

<table>
<thead>
<tr>
<th>Variable</th>
<th>ADF Statistics</th>
<th>Order of integration</th>
<th>Lags</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td>-3.246</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>CRED</td>
<td>-4.2641</td>
<td>0</td>
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<tr>
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The critical values for ADF: 5 percent = 0.00, the results were reported at 95 percent level of Significance. The third column (order of integration) shows the level at which the variables were stationary, that is, 0, 1 and 2 means that the variables are stationary at levels, first difference and second difference respectively.

The reported unit root results indicate that variables FDI, CRED, URS, IRR, XRT, S, G are stationary and therefore of integrated order zero. The other variables were non-stationary and hence were differenced respectively to achieve stationarity.
### 4.2 Interpretation Of The Results

**Table 4.2: Generalized Least Squares Estimated Model**

Dependent variable: FDI

<table>
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<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
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<tr>
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</tr>
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<td>-0.0209</td>
<td>0.0093</td>
<td>-2.2442*</td>
</tr>
</tbody>
</table>

R-squared | 0.7853 | Reset F | O.7456 (0.3992) |
Adjusted R-squared | 0.6610 | Jarque-Bera | 0.2693(0.874) |
Durbin Watson statistic | 1.2463 | Arch lm F | 0.7456(0.114) |
F statistic | 9.2690(0.5362) | White heteroskedasticity F | 1.0273(0.5186) |

Note: * significant at 5% level of significance.

The presentation of the interpretation is based on the table (4.2) above for the linear model. Various diagnostic econometric tests were done, for example, a correlation matrix was generated using Eviews econometric software for all variables (see appendix ii). This was done to test for the existence of multicolinearity. The results showed that the degree of multicolinearity was not high. High degree of multicolinearity exists if the coefficients are approaching one. The Durbin
Watson statistic (1.2463) showed the absence of serial correlation between the variables in the model while white heteroskedasticity F (1.0273) showed the absence of heteroskedasticity in the model.

Further, the linear regression model passed both the stability and the normality tests as shown by the appendixes (iii) and (iv) respectively. Estimates were used to check for the model and parameter stability. This was generated from Eviews econometric package. The entire observations lie within the graph (parallel lines) as shown in the CUSUM graph in appendix (iii). The test for normality is confirmed by the Jarque Bera statistic (0.2693) and the normality graph in appendix (iv).

The Adjusted R-squared of sixty six per cent is fairly impressive implying that most of the variation in FDI is explained by the estimated model. Five of the variables were statistically significant at 5 per cent level of significance, these include economic openness (ECOP), internal rate of return (IRR), domestic investment (INV), credit available from the banking authority (CRED) and the exchange rate (XRT), while the remaining were not statistically significant at the same level of confidence. All the signs of the linear estimation were correct (consistent with the theory) except for internal rate of return (IRR), external debt (EDT), and university enrolment rate (URS). In general, the estimated model is reliable in the following sense, measures of statistical reliability of parameter estimates (t-statistic), model (F-statistic) and the measure of goodness of fit (Adjusted R-squared).

What follows is a discussion of all the variables of the estimated model concerning sign, statistical significance, and the implication of the same.
Economic Openness (ECOP)

As expected, economic openness is significantly positively related with foreign direct investment inflows, demonstrating that relatively free markets for capital, goods and services domestically and interaction with the outside world have a positive impact on FDI inflows. The coefficient and the significance of this variable indicate that a global increase in economic openness over time causes the rise of FDI inflows.

External Debt (EDT)

This variable did not confirm the hypothesis that foreign aid significantly influences the level of foreign direct investment inflows. It has a negative sign, which is inconsistent with the general economic theory. This could be explained by the fact that the Kenyan economy has been subjected to net financial outflows (of debt related flows) since the mid 1980s. This indicates that Kenya could not be capable of simultaneously servicing its debt and attaining a reasonable level of economic growth which is a prelude to upsurge in foreign direct investment inflows.

Growth Rate Of The GDP (G)

This variable is significantly positive, implying that FDI is positively correlated with the growth rate. The finding suggests that foreign direct investment tolerates a high degree of economic growth. A country with a higher GDP growth rate is economically and financially more developed, more likely to generate more domestic saving and investment which would in turn increasing attract FDI. In sum, much of the preconditions for sustained flow of FDI to Kenya depend on all enabling conditions for high level of growth.
Inflation Rate (INF)
As expected, high inflation rate, which usually imply high cost of production, is negatively, insignificantly correlated with FDI inflows. This negative impact of inflation rate on FDI inflow can be explained by the fact inflation in any form constitute a burden on business. The insignificance can be explained by the fact that fluctuations in prices have persisted in the period covered.

Domestic Investment (INV)
This variable is positively correlated with FDI inflows and therefore consistent with the theory and is a significant explanatory variable. This finding concurs with earlier observations that domestic investment actually supplement foreign direct investment. Investment establishment in a local economy provides a base for foreign investors to embark on their mission.

Exchange rate (XRT)
This variable is significantly negatively correlated with the level of foreign direct inflows and hence consistent with the theory. The levels of the exchange rate affect FDI through the capital account. Capital inflow can be encouraged by the under valuation of the exchange rate, on the contrary overvaluation of the same achieve very little in boosting foreign direct investment.

University Enrolment Rate (URS)
University enrolment rate is a fairly shallow variable, which explain human capital and educational fitness. It shows the unexpected negative sign and is insignificant. It was expected that contrary to the above findings, that URS would confirm the hypothesis that education is positively correlated with foreign direct investment. The above results can be explained by the
fact that a proxy was used to capture the variable. In addition high rate of unemployment in the country which have seen masses of college graduates being not absorbed in productive engagement resulting to brain drain.

Gross Domestic Saving (S)
As expected, this variable is positively correlated with foreign direct investment although it is not significant at 95 per cent level of confidence. The result, supported by empirical evidence from other studies, indicates that FDI have been increasingly seeking opportunities in mid and low income economies, which is construed to mean low saving, rate. The finding therefore validates the classical view that FDI can serve as a stepping-stone for developing economies on their way to become emerging economies and then emerging markets.

Trade Balance (TV)
Contrary to theoretical expectations the findings show that TV is insignificantly negatively correlated to foreign direct investment. In other words, a positive balance of trade encourages foreign direct inflows. The exception in the results can be explained by the fact that have been running a deficit balance of trade in the period analyzed. This negative balance of trade has had adverse effects on performance of FDI.

Domestic Credit Provided By The Banking Sector (CRED)
As expected, credit provision is significantly positively correlated with FDI. The results corroborates with findings from other studies. From the viewpoint of the foreign investors, they find host-country credit and banking facilities inadequate and thus tend to rely on credit from their home countries. However, given that some firms do not enjoy access to home country credit for FDI operations, the provision of credit in the host country can be deemed as furthering FDI.
**Internal Rate Of Return (IRR)**

Internal rate of return is a statistically significant variable at 5 per cent level of significance and has a negative coefficient as per the theoretical expectations. The findings suggest that high IRR discourage foreign direct investment since the local borrowing is costly and hence controlled. On the other hand, foreign investors will take advantage of high IRR in a local economy, that is, they will not borrow but will bring in cash from abroad and invest rather than borrow domestically.
CHAPTER FIVE
SUMMARY, CONCLUSION AND POLICY RECOMMENDATIONS

5.1 summary and conclusions
This paper was motivated by the fact that Kenya faces a big challenge in attracting and sustaining foreign direct investment at levels that allow domestic investment to take advantage of benefits associated with capital inflows. Further, an attempt to examine the possibility of tackling problems of capital flight was also a motivation towards the study. The study therefore sought to conduct an empirical investigation on the determinants of foreign direct investment in Kenya.

The review of government policies and programmes revealed that a number of policies and programmes had been put in place and implemented since 1965. These policy directives have been aimed at promoting and attracting foreign direct investment. The theoretical framework is based on the concept of institutional FDI fitness theory, developed by author Saskia Wilhelms. The study used data over the period 1967-1999, partly because after independence (1963), marked the beginning of the planned development process. The econometric tests adopted ensured that the regression analysis avoided problems of spurious regressions, which occur when variables are non-stationary, the existence of other long run relationship were also tested.

The estimated linear regression model reveals that, economic openness is the most significant determinant of foreign direct investment inflows in Kenya. Other variables that were significant determinant of FDI inflows included growth rate of GDP, credit availability from the monetary authority, domestic investment, the exchange rate and internal rate of return. The rest of the remaining variables in the estimated model were statistically insignificant. They are, external debt, inflation rate, trade balance, university enrolment rate and gross domestic savings.
Sixty six per cent (adjusted R-squared) of the variation is explained by the estimated model. Other variables that are not captured in the model like corruption and governance, policy consistency and terrorism can partly explain the remaining variation.

5.2 Policy Recommendations

Foreign direct investment as already pointed earlier, has an important role to play in the economy in terms of employment creation, and export expansion thus making it very essential in the economy. It is with this premise that the policy recommendation arose based on the study findings.

Economic openness in form of free market is vital. Economic policies allowing free investment and trade are key determinants of FDI inflows. This means little directive regulation, particularly no control on currency exchange or on imports and exports. In this case, it is recommended that the government should adopt policies supporting international trade and try to remove tariff barriers on imported inputs. With the recent appreciation of liberalization and regional integration in Kenya, this objective will be achieved.

Domestic investment proves to have a very high explanatory power; this stresses the importance of adoption of policies that will stimulate domestic investment and improve infrastructure in Kenya. In fact much resource has been channeled to loss making and inefficient parastatals at the expense of the right infrastructural investment required supplementing FDI, which have been under funded. This includes energy, water, and transport and communication sector crucial for economic growth. This has made foreign investors to invest in areas, which are not good enough to spearhead economic growth.
In the medium-term perspective, the resumption of growth undoubtedly requires an increase in investment ratio, which comes primarily from private sector. However, in spite of the modest achievements of the reform programme implemented in the 1990s, macroeconomic instability; high inflation and exchange rate overvaluation remain a concern for Kenya. From the analytical and empirical evidence above the economy has much to gain in terms of investment from further progress in the reduction of macroeconomic volatility and imbalances. Establishing a macroeconomic stability emerges as a major policy priority.

The growth rate of GDP is a significant booster to foreign direct investment; it is therefore acceptable that FDI can take place in countries with degree of economic development. The government then, through its various policy document should continue showing commitment to generation and sustenance of a high and a positive real GDP growth rate.

Credit availability from the monetary authority empirically proved to be a significant factor, there is therefore need for the government to ascertain the liquidity needs of the economy and thereby create a greater certainty in the amount of credit available to all the investors and therefore regulate the process of financial intermediation in the economy.

5.3 Suggestions For Further Research
From the viewpoint of investors, the stability and predictability of the incentive framework may be much more important than the level of incentives themselves. Institutional reforms ensuring policy predictability, effective property rights and the stability of the basic “rule of the game” augurs well with FDI response. However, the estimated model could not capture this factor. Corruption and governance, which is a significant determinant of foreign direct investment, could
not be incorporated in the model because of its qualitative nature. It is therefore necessary research to be done in this area to ascertain the exact relationship between FDI and these variables and how improvement can be made in the same area.

Various studies on Foreign direct investment revolves around the analysis of factors that affect it. Whereas the government of Kenya have appreciated and adopted various macroeconomic reforms to promote foreign direct investment, little have been done to assess the effect and significance of these Promotional programmes as a tool of attracting foreign investment flows. This area is therefore ripe for further research.


### Table 4.3: Summary of The Raw Data

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<th>S</th>
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<th>CRED</th>
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### APPENDIX II

#### Table 4.4: Correlation Matrix

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### APPENDIX III

#### STABILITY TEST

![CUSUM Chart](chart.png)
Normality Test

Series: Residuals
Sample 1969 1999
Observations 31

Mean: -5.55E-17
Median: 0.006230
Maximum: 0.577628
Minimum: -0.708255
Std. Dev.: 0.304425
Skewness: -0.105036
Kurtosis: 2.594594
Jarque-Bera: 0.269292
Probability: 0.874025