Institutional Factors and Foreign Direct Investment Flows: Implications for Kenya

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Abstract

This study looks at the relationship between Foreign Direct Investment (FDI) flows and various institutional factors. The study uses data for developing countries and draws implications for Kenya. Kenya has in the last decade lost, as a destination for FDI flows, to its neighbouring countries and the question is, how can Kenya regain its position? Results from this study show that Kenya needs to improve its macroeconomic environment and strengthen its institutional base. The government should put a lot of resources to curb crime and restore law and order, embrace positive democratic practices, maintain stability and embrace zero-tolerance on corruption in order to gain substantially in investment growth and particularly in FDI flows. While the economy requires more inflow of external resources to boost public investment, it is important that the flows are efficiently utilized to promote investment and economic growth. It is also important that care is taken to maintain debt sustainability. Growth of the economy is crucial as a pull factor and as a complement to openness of the economy. Attaining and sustaining macroeconomic stability is also a crucial factor in attracting FDI.

Abbreviations and Acronyms

AGOA	African Growth Opportunity Act
BAT	British American Tobacco
BRELA	Business Registration and Licensing Agency
EA	East Africa
EPZs	Export Processing Zones
ERS	Economic Recovery Strategy
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GHT	Global Horizons Theory
GNI	Gross National Income
GoK	Government of Kenya
HDI	Human Development Index
ICRG	International Country Risk Guide
IPC	International Product Cycle
IT	Internationalization Theory
KIPPRA	Kenya Institute for Public Policy Research & Analysis
LSDV	Least Square Dummy Variable
M&As	Mergers and Acquisitions
MNCs	Multinational Corporations
MNEs	Multinational Enterprises
OLS	Ordinary Least Squares
PT	Portfolio Theory
RPED	Regional Program on Enterprise Development
SSA	Sub-Saharan Africa
TNCs	Trans-National Corporations
TRIMs	Trade-Related Investment Measures
UN	United Nations
UNCTAD	United Nations Centre for Trade and Development
US	United States

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1. Introduction

Foreign Direct Investment (FDI) flows in Sub-Saharan Africa (SSA) show shifts in their destination. Two decades ago, cumulative FDI in the East African (EA) region was predominantly in Kenya, which had 87% of foreign ownership of companies in the EA region. In recent period, however, Uganda and Tanzania are taking up an increasing share as indicated in Table 1. For example, in the year 2002, only 5.4% of foreign ownership in the East African region was in Kenya as compared to 48.2% and 46.4% in Uganda and Tanzania, respectively. Further, FDI to Kenya was 31.8% of the total in SSA in the year 1980 but this fell to less than 1% in the year 2002. In contrast, Uganda's share in the SSA region rose from 1. 6% to 3.1% and that of Tanzania rose from 2.0% to 2.9%. These trends show that Kenya is increasingly losing foreign investment to its neighbouring countries. The question is, why is Kenya no longer a favourable destination for FDI?

Various factors are attributed to the experienced trend in FDI flow. For example, UNCTAD (2002) attributes the experience to fear of political instability, which was worsening in Kenya while improving in Uganda and Tanzania; standoff with the Bretton Woods institutions, which scared off investors; governance issues which saw the investment climate deteriorate; and low economic growth in Kenya compared to other EA countries. The Regional Program on Enterprise Development (KIPPRA/World Bank, 2004) identifies such factors as crime and violence, corruption, infrastructure and macroeconomic variables as major issues of concern to investors. In addition, a recent KIPPRA study (Ngugi *et al.*, 2004) shows that crime and violence is a major factor that investors consider in making their investment decisions. Further, the Economic Recovery Strategy (ERS) (2003) puts a lot of emphasis on maintaining law and order in enhancing the investment climate.

Table 1: FDI inflows, outflows and net flows (millions of US dollars)

Region/economy	1970	1980	1990	2000	2001	2002	2003
FDI Inflows							
World	13,032	54,986	208,646	1,387,953	817,574	678,751	559,576
Developing countries	3,555	8,421	36,897	252,459	219,721	157,612	172,033
Asia and the Pacific	947	527	24,854	146,195	111,966	94,474	107,278
Asia	811	407	24,310	146,067	111,854	94,383	107,120
Latin America and the Caribbean	1,681	7,494	9,615	97,537	88,139	51,358	49,722
Africa	926	400	2,427	8,728	19,616	11,780	15,033
Sub-Sahara Africa	524	248	1,270	5,810	14,126	8,149	9,250
EAC	21	88	51	667	701	517	613
Kenya	14	79	57	111	5	28	82
Uganda	4	4	-6	275	229	249	283
Tanzania	3	5	0	282	467	240	248
FDI Outflows							
World	14,157	53,683	24,2057	1,186,838	721,501	596,487	612,201
Developing countries	47	3,319	16,247	98,929	59,861	44,009	35,591
Asia and the Pacific	-1	1,062	10,940	83,872	50,425	37,885	23,637
Asia	-1	1,044	10,935	83,805	50,309	37,884	23,608
Latin America and the Caribbean	29	1,129	3,210	13,738	11,971	6,009	10,666
Africa	19	1,128	2,098	1,319	-2,535	115	1,288
Sub-Sahara Africa	17	1,002	1,962	1,092	-2,738	-152	1,140
EAC	0	1	-12	-27	-5	-6	-13
Kenya	-	1	0	0	0	7	2
Uganda	-	-	-12	-28	-5	-14	-15
Tanzania	-	-	-	1	0	0	0
FDI Net flows							
World	-1,125	1,302	-33,410	201,115	96,073	82,264	-52,626
Developing countries	3,508	5,102	20,649	153,530	159,860	113,603	136,441
Asia and the Pacific	948	-536	13,914	62,322	61,541	56,589	83,641
Asia	812	-637	13,374	62,261	61,545	56,499	83,511
Latin America and the Caribbean	1,652	6,366	6,405	83,799	76,168	45,349	39,056
Africa	907	-728	330	7,408	22,151	11,665	13,745
Sub-Sahara Africa	507	-754	-692	4,718	16,863	8,300	8,109
EAC	21	86	63	694	706	523	626
Kenya	-	78	58	111	5	20	80
Uganda	-	-	6	302	234	263	299
Tanzania	-	-	-	281	467	240	248

Source: UNCTAD website, http://www.unctad.org/Templates/Page.asp? United Nations

A major part of the literature analyzes the implications of these institutional factors using political risk as a variable. This is a composite variable that includes such factors as corruption, governance, democracy, law and order, bureaucracy and internal and external conflicts. The few literature that have attempted to analyze the individual factor's contribution have not analyzed the implications of law and order, but have generally looked at the issue of governance.

This study looks at the contribution of various institutional factors on the flow of FDI and draws lessons for Kenya in its effort to attract more FDI. It analyzes the contribution of such factors as maintenance of law and order, corruption and government stability in attracting foreign investors.

The rest of the paper is organized as follows: Section 2 looks at FDI flows to Kenya, while Section 3 reviews the literature on determinants of FDI. The data and estimation procedure is described in Section 4. Section 5 presents the results and Section 6 concludes the paper.

2. Kenya and Foreign Direct Investment

2.1 FDI flows to Kenya

FDI flows to Kenya have not been sustained over the last decade. As shown in Table 2, net FDI to Kenya almost stagnated over the last decade with negligible improvement in 2000s. There was a sharp rise in the year 2000 reflecting new investments by mobile phone companies and accelerated offshore borrowing by private companies to finance electricity generation activities, which became necessary due to drought in the period.

Table 2: FDI inflows to Kenya, 1970-2003

Year	Net inflows (US$ million)	Net inflows (% of GDP)	Net inflows (% of gross capital formation)
1970	13.80	0.86	4.37
1971	7.40	0.42	1.83
1972	6.30	0.30	1.36
1973	17.26	0.69	3.32
1974	23.42	0.79	4.10
1975	17.16	0.53	2.61
1976	46.37	1.33	6.68
1977	56.55	1.26	6.00
1978	34.41	0.65	2.59
1979	84.01	1.38	5.81
1980	78.97	1.09	4.71
1981	14.15	0.21	0.88
1982	13.00	0.20	1.06
1983	23.74	0.40	2.20
1984	10.75	0.17	0.96
1985	28.85	0.47	2.69
1986	32.73	0.45	2.30
1987	39.38	0.49	2.52
1988	0.39	0.00	0.02
1989	62.19	0.75	3.86
1990	57.10	0.67	3.23
1991	18.80	0.23	1.21
1992	6.00	0.07	0.44
1993	2.00	0.04	0.21
1994	4.30	0.06	0.32
1995	33.00	0.36	1.71
1996	10.55	0.11	0.58
1997	52.52	0.49	2.81
1998	11.41	0.10	0.60
1999	13.82	0.13	0.86
2000	110.90	1.06	7.26
2001	5.31	0.05	0.34
2002	27.63	0.22	1.71
2003	81.75	0.59	5.21

Source: UNCTAD FDI database

Table 3: Largest affiliates of foreign TNCs in the host economy, 2002

Company	Home economy	Industry	Sales (million $)	Employees (No.)
A. Industrial				
British American Tobacco (Kenya)	United Kingdom	Tobacco	151	780
East African Industries	United Kingdom	Pharmaceuticals	141	1,920
Unilever Kenya	United Kingdom	Food	117	1,400
Brooke Bond Kenya	United Kingdom	Agriculture	43	19,767
EA Portland Cement Company	France	Non-metallic mineral pdcts	33	515
Carnaud Metalbox	United States	Metals	23	300
The Standard	United Kingdom	Printing and publishing	15	323
George Williamson Kenya	United Kingdom	Agriculture	14	4,813
Rhone Poulenc Kenya	France	Pharmaceuticals	13	128
Cadbury Kenya	Netherlands	Food	12	230
Nestle Foods Kenya	Switzerland	Food	11	116
Elida Ponds Kenya	United Kingdom	Pharmaceuticals	11	..
Teita Estate	Greece	Textiles	7	50
Kapchorua Tea Company	United Kingdom	Agriculture	4	1,685
Henkel Polymer Co	Germany	Chemicals	3	111
B. Tertiary				
Basf East Africa	Germany	Trade	3,812	400
Total Kenya	France	Trade	202	320
Express Kenya	Switzerland	Transport and storage	44	345
Amiran Kenya	United Kingdom	Trade	30	102
Tibbett and Britten Kenya	United Kingdom	Transport and storage	21	530
Cetco	Germany	Trade	13	25
Hoescht East Africa	France	Trade	7	300
Kodak (Kenya)	United States	Trade	4	50
The Crown Cork Company (EA)	United States	Other business services	4	50
Blackwood Hodge (Kenya)	United Kingdom	Trade	3	50
Colas (East Africa)	France	Other business services	2	80
Express Mombasa	Switzerland	Transport and storage	-	9,280
Securicor (Kenya)	United Kingdom	Other business services	..	5,200
Interfreight (Kenya)	Switzerland	Transport and storage	..	400
Jos Hansen and Soehne (EA)	Germany	Trade	..	210
C. Finance and Insurance				
Barclays Bank of Kenya Ltd	United Kingdom	Finance	937	2,024[a]
Stanbic Bank Kenya Ltd	South Africa	Finance	84	125[a]
Middle East Bank Kenya Ltd	Belgium	Finance	52	59[a]
Dubai Bank Kenya Limited	U.A.E.	Finance	10	..[a]
United Provincial Assurance Society	United Kingdom	Insurance	6	66
Standard Chartered Bank (Kenya)	United Kingdom	Finance	..	1,130
American Life Insurance Co.(Kenya)	United States	Insurance	..	209
Phoenix of East Africa Assurance Co.	United Rep.	Insurance	..	90
Independent Adjusters Kenya	Netherlands	Insurance	..	6
Insurance Holdings (Africa)	United States	Finance	..	3

Sources: The Banker's Almanac, 2003 (London, Reed Information Services, 2003); Thomson Analytics (http://analytics.thomsonib.com/); Who Owns Whom, 2003 (London, Dun and Bradstreet, 2003).

[a]December 2001.

Note: The table is adapted from UNCTAD WIR Country Profile: Kenya (2003)

Table 3 shows the largest Trans-National Corporations (TNCs) based in Kenya as of the year 2002. Most of these TNCs are affiliated with United Kingdom and United States. There are differences in concentration areas of this TNCs by origin where for example, Switzerland's TNCs are mainly in transport and storage services, while financial sector services attract most of the economies.

The type of FDI portrayed by these TNCs is generally horizontal or market securing. It generally targets to supply the domestic market at a closer range and, therefore, is driven by the size and growth of the host market. Therefore, these TNCs are expected to respond to factors that influence their access to customers including the security element. For example, during the tribal clashes in the Rift Valley region in Kenya, some of these firms reported that their product distribution was adversely affected and this had implications on their sales and profitability. Only a few are in the primary sector, especially mining and agriculture.

Some of these firms are listed at the Nairobi Stock Exchange, for example, Brooke Bond Kenya, the Standard Group and British American Tobacco (BAT), giving the locals a proportionate ownership. Those re-locating, however, retained their full foreign ownership which made it easier to re-locate.

Considering the type of FDI in Uganda and Tanzania, most of the top TNCs are affiliated to developing countries especially African countries like Kenya and South Africa. In Uganda, companies affiliated to Kenya are mainly involved in industrial production and trade, while in Tanzania they are in the services sector. TNCs affiliated to United Kingdom are mainly in industrial production in these economies (Appendix Table 1).

Given that most of these TNCs were established before the reform process, it means that they were responding to the prevailing trade

Table 4: Firms operating in EPZs, 2002

Company	Ownership	Activity	Date of Operation
Birch Investments	Hong-Kong	Garments	Mar-93
Indigo Garments	India	Garments	Sep-99
Jar Kenya	USA	Garments	Jul-97
Kenap	n.a	Garments	Sep-99
Tri star	Kenya	Garments	Sep-94
Upan Wasana	Sri Lanka	Garments	Sep-01
Kapric Apparels	Hong Kong	Garments	Jan-01
Kentex Apparels	India	Garments	Jan-01
Carlifornia Link EPZ (K) Ltd	Sri Lanka	Garments	Mar-01
Union Apparels	Sri Lanka	Garments	Jul-01
MRC Nairobi	Sri Lanka	Garments	Oct-01
Sino Link	China	Garments	Aug-01
Sahara Stitch	Kenya	Garments	Dec-01
Sin Lane K	Taiwan	Garments	Dec-01
Protex K	Taiwan	Garments	Nov-01
Mirage Fashion Wear	India	Garments	Mar-02
Kenya Knit Garments	Taiwan	Garments	Mar-02
Wild Life Works	USA	Garments	Mar-02
Global Apparels (K)	India	Garments	Mar-02
Rolex Garments	India	Garments	Mar-02
Baraka Apparels	Kenya	Garments	Mar-02
Forum International	n.a	Garments	2002
Mega Garments Industries	Sri Lanka	Garments	Aug-02
Blue Bird Garments	Kenya	Garments	Nov-02
Altex	Kenya	Garments	Oct-02
Rising Sun	Sri Lanka	Garments	Oct-02
Ashton Apparels	India	Garments	Aug-01
Orange Styles	India	Garments	Dec-02
Senior Best Garments	Taiwan	Garments	Nov-02
Ancheneyar	Sri Lanka	Garments	Dec-02
Lihua Garments	China	Garments	Dec-02
Premium Machinery Distribution	India	Sewing machines	
TJM Apparel Solutions	India	Sewing machines	Nov-02
Rupa Cotton Mills	Kenya	Cotton yarn	Oct-01
De La Rue Currency and Security	n.a	Currency & security	Mar-93
EA Molasses	Kenya	Storage/lubrication	Jan-93
Golden Light	China	Torch bulbs	Oct-99
Indu Farm	Netherlands	Fruits & vegetables	Oct-00
Insight Digital Graphics EPZ	UK	Digital printing	Feb-00
Ivee Aqua	India	Pharmaceuticals	Sep-95
Logistic Container Centre	Denmark	Container repair	Dec-97
Nodor Kenya	UK	Darts board	Sep-99
Norbrook Africa	UK	Pharmaceuticals	Apr-96
Oil Tanking	South Africa	Bitumen	Jan-93
Pwani	Kenya	Edible oil	Jul-00
Rayven	UK/Kenya	n.a	Oct-92
Rosavle	Belgium	Preserved L	Mar-98
Muthama Gemstones	Kenya	Gemstones	Jan-01
Film Studios	Kenya	Hiring films	Jan-01
Plastic Compounders	UK	PVC compound	Jul-01
Cybel Agric	Kenya	Veterinary	Oct-01
Newcal Technologies	Kenya	Computer technology	Oct98
Transfleet	Pakistan	Godowns	Jan-95
Match Point	USA	Buying office	Oct-02

Source: Mwega and Ngugi (2005)
n.a – information not available

government showed very minimal response to tackling the problem. At the moment, the government is making efforts in dealing with the issue, though development partners still feel the government is not doing enough. Foreign investors have lost confidence in the Kenyan

policy. Therefore, a change in trading policy that reduces the tariff and transport costs and opens the economy may see change in the pattern of FDI distribution. Some of these firms, for example, enjoyed competition protection through the import substitution strategy. With the adoption of export promotion strategy, those opened to heavy competition re-located but others did not face high competition from entry of new players and have retained their market monopoly.

The changing trading policy in Kenya, especially the introduction of Export Processing Zones (EPZs), has attracted a new type of FDI in terms of their country of origin and activities carried out. As shown in Table 4, there is a lot going into garment industry to take advantage of the AGOA initiative.

2.2 Investment environment

Investors consider various factors in making their investment decision. They consider cost of doing business, institutional set up, market size and infrastructure. All these have implications on the investment costs and the type of investment to be undertaken.

a) Institutional factors

In the KIPPRA/World Bank (2004) study, investors rated corruption, cost of finance and crime, theft and disorder as major issues of concern in promoting private sector activities in Kenya. More than 70% of the firms ranked corruption and cost of finance as major issues for business while about 70% of the firms ranked crime, theft and disorder as a major issue. Some firms also ranked tax rates, anti-competitive practices, and economic and regulatory policy uncertainty as high among business concerns.

Corruption has been a major issue in the reform agenda and resulted in the suspension of structural adjustment support in 1997, as the

Table 5: Firm's perception about business environment (% of firms evaluating constraints as "major" and "severe"

Indicator	Kenya	Tanzania	Uganda
Corruption	73.8	51.0	38.2
Cost of finance	73.3	57.8	60.3
Crime, theft and disorder	69.8	25.4	26.8
Tax rates	68.2	73.4	48.3
Anti-competitive	65.3	24.3	31.1
Policy uncertainty	51.5	31.4	27.5
Macroeconomic instability	51.3	42.9	45.4
Tax administration	50.9	55.7	36.1
Electricity	48.1	58.8	44.5
Telecommunications	44.1	11.8	5.2
Access to finance	44.1	48.3	45.0
Customs administration	39.9	31.4	27.4
Transportation	37.4	22.8	22.9
Skills of workers	27.6	25.0	30.8
Access to land	24.6	24.6	17.3
Labour regulations	22.5	12.1	10.8
Business licensing	15.2	27.4	10.1

Source: World Bank/KIPPRA, RPED Kenya, 2003

economy because of the constrained relationship between the government and development partners.

Crime is a major factor that is constraining the activities of the private sector. In 1990s, Nairobi was rated by the UN as one of the most dangerous capital cities and was downgraded from class B to C in the UN classification of security. During those years, Kenya experienced internal conflicts characterized by tribal clashes in Rift Valley and Coast provinces. Furthermore, the perceived insecurity status in the country associated with terrorist attacks in 1998 and 2002 has also created a negative image of the country as a destination for investors. Table 6 shows the trends in crime, indicating an increasing proportion of crime on property. At the moment, the government is making some effort to improve the situation.

Table 6: Annual crime statistics (1998-2004) as reported to the police

Offence	Year						
	1998	1999	2000	2001	2002	2003	2004
Murder (including attempt)	1,637	1,625	1,807	1,688	1,661	1,395	1,411
Rape (including attempt)	1,329	1,465	1,675	1,987	2,005	2,308	2,908
Manslaughter	5	16	18	8	3	5	22
Assault	10,847	11,891	13,035	12,611	12,689	13,401	15,715
Other offences against a person	2,920	3,173	3,563	3,020	3,006	3,516	4,221
Robbery and allied offences	8,303	8,612	8,923	9,180	8,504	8,711	7,863
Break-ins	11,282	9,940	10,712	10,363	8,338	9,037	9,150
Theft of stock	2,333	2,278	2,906	2,327	2,087	2,291	2,659
General stealing	8,899	9,591	10,129	8,919	8,340	9,916	11,392
Theft of motor vehicle	1,081	1,004	896	960	1,043	803	758
Theft of motor vehicle parts	934	770	748	753	587	708	655
Theft from motor vehicles	624	526	569	558	420	399	326
Theft of bicycles	596	652	836	565	448	623	616
Theft by servant	3,230	3,075	3,221	2,757	2,371	2,957	2,761
Dangerous drugs	5,171	5,912	5,481	5,300	4,467	4,742	5,940
Handling stolen property	347	384	361	347	299	299	301
Corruption	145	43	42	23	76	50	200
Causing death by dangerous driving	304	259	346	301	298	295	210
Other offences against property	3,168	3,359	3,555	3,073	3,363	3,753	4,011
All other penal code offences	9,418	10,415	11,320	10,612	10,418	12,131	12,722
TOTAL	**73,673**	**74,990**	**80,143**	**75,352**	**70,423**	**77,340**	**83,841**

Source: Government of Kenya Economic Survey 2004, 2005

Table 7 provides a more global picture on the institutional ratings. It shows, from the low rating, that the average risk level was higher in Uganda than in Kenya in early 1990s but this has improved tremendously from an index of about 45% to about 57% in the year 2000. Corruption was a major problem for the EA countries especially in the late 1990s with all of them scoring a lower rating for this index. Kenya has had a low rating of law and order and the situation does not seem to improve. Also, government stability is a major issue in Kenya than the other EA countries. The risk due to external conflict increased after 1998 and this may be attributed to threats of terrorism after the bomb attack in Nairobi in the same year. There is more political freedom in South Africa, as measured by the political rights and civil liberty indices, than in the EA countries with less freedom experienced in Kenya than the rest of the economies.

Table 7: Political risk indicators for selected countries

Country/Year	ICRG-risk rating	Government stability index	Investment profile index	Internal conflict index	External conflict index	Corruption index	Law and order index	Political rights index	Civil liberty index
Av. for 1990 - 1995	58.58	4.81	5.64	8.19	9.78	3.00	3.25	5.67	5.83
1996	67.92	6.33	5.00	11.00	12.00	3.00	4.00	7.00	6.00
1997	64.67	8.42	6.17	9.17	12.00	2.67	4.00	6.00	6.00
1998	57.25	9.92	7.00	5.42	11.92	2.00	2.17	6.00	5.00
1999	53.67	9.58	6.58	7.00	9.25	2.00	2.00	6.00	5.00
2000	50.92	9.00	6.33	7.50	7.58	2.00	2.00	6.00	5.00
2001	55.58	9.58	8.50	9.17	9.50	2.00	2.00	6.00	5.00
2002	51.71	8.42	9.00	8.33	9.50	2.17	1.58	4.00	4.00
2003	61.00	9.75	9.42	8.79	10.29	3.46	1.96	3.00	3.00
South Africa									
Av. for 1990 - 1995	64.74	7.07	6.46	7.46	9.83	5.00	2.38	3.83	3.50
1996	74.92	5.33	7.00	11.00	12.00	5.00	4.00	1.00	2.00
1997	74.67	8.00	8.25	10.58	11.92	5.00	3.33	1.00	2.00
1998	72.42	10.42	9.92	9.25	10.50	3.67	2.58	1.00	2.00
1999	67.08	11.00	8.25	8.08	9.50	3.00	2.25	1.00	2.00
2000	65.08	10.00	7.08	8.00	10.00	3.00	2.00	1.00	2.00
Uganda									
Av. for 1990 - 1995	45.31	6.65	5.00	6.64	5.58	3.00	2.44	5.67	5.00
1996	53.17	8.33	6.50	7.00	5.00	2.50	4.00	4.00	4.00
1997	55.25	10.00	8.25	7.00	4.58	2.00	4.00	4.00	4.00
1998	58.83	9.75	10.00	6.67	6.42	2.00	4.00	4.00	4.00
1999	54.50	9.00	8.17	5.08	7.08	2.00	4.00	5.00	5.00
2000	57.17	10.00	8.00	5.83	8.33	2.00	4.00	6.00	5.00
Tanzania									
Av. for 1990 - 1995	61.86	6.93	5.79	8.28	10.29	4.00	4.11	5.83	5.17
1996	64.08	6.25	6.00	11.00	9.00	3.00	5.00	5.00	5.00
1997	65.00	8.75	6.83	11.00	9.25	2.92	5.00	5.00	5.00
1998	67.33	9.33	8.00	11.00	10.00	2.00	5.00	5.00	4.00
1999	66.67	10.00	8.00	10.25	10.00	2.00	5.00	4.00	4.00
2000	64.33	10.00	8.00	8.33	10.00	2.00	5.00	4.00	4.00

Source: ICRG Ratings (PRS Group), Freedom in the House indices (Freedom in the World Country Ratings).

Note: ICRG risk rating gives the overall political risk rating for a country for all indices. Government stability, investment profile, internal conflict, external conflict, corruption and law and order indices are from the *ICRG ratings*. Political rights and civil liberty indices are from *Freedom House* rating.

b) Infrastructure position

The KIPPRA/RPED (2004) report also indicates that poor infrastructure status in Kenya is of major concern to the investors. The level of international communication proxied by the minutes of outgoing traffic per subscriber is higher in EA countries compared to South Africa (Table 8). While this depicts the contact between residents of a specific country and other countries, it may also show inefficiencies in the telecommunication channel, such that it may take longer to pass the same information in places with inefficient telecommunication infrastructure with the resulting cost being higher. This may explain why South Africa, which is considered to be more developed than the rest of the EA economies has the lowest time taken by subscribers. The telephone per capita, as measured by telephone subscribers per 1,000 population, is higher in Kenya compared to Tanzania and Uganda, but lower than in South Africa. Telephone per capita captures the proportion of the population covered by the telecommunication network (i. e. customer's equipment connected to the public switched telephone) and, therefore, accessibility to a telephone. This means that mobile telephone users are not taken into consideration by this measure.

c) Cost of doing business

Among the factors taken into consideration by firms before they put their investment in place is the cost of doing business in a country. This has implication on the production costs either through increased costs of operation or through higher costs of inputs. Table 9 provides the cost of doing business across selected countries to show a comparative position for Kenya.

The table shows that although the number of procedures and the cost of starting a business in Kenya are not as high as in Uganda and Tanzania, it takes much longer (47 days) to complete the process. Such

Table 8: Infrastructure indicators for selected countries

Country/Year	Kenya	South Africa	Uganda	Tanzania
International telecommunication, outgoing traffic (minutes per subscriber)				
Av. 1990-1995	102.11	64.49	129.48	50.30
1996	97.88	82.89	121.02	68.88
1997	106.70	79.44	117.35	96.65
1998	101.35	79.80	111.68	91.96
1999	91.28	84.05	111.81	76.68
2000	74.49	99.68	108.63	74.62
2001	74.81	103.56	124.67	63.12
2002	-	117.09	-	72.94
Telephone subscribers per 1,000 population				
Av. 1990-1995	9	100	2	3
1996	10	106	2	3
1997	10	113	3	4
1998	10	120	3	4
1999	11	128	3	5
2000	10	114	3	5
2001	10	111	2	4
2002	10	107	2	5

Source: WDI 2004 CD-ROM, World Bank

a long duration could mean more costs to investors, especially in terms of utilizing timely investment opportunities.

To enforce a contract in Kenya is more costly and takes longer than enforcing the same contract in other countries. Such a long duration opens up chances for corruption and, therefore, more costs to investors. The high costs (as a percentage of GNI per capita) imply that firms have to spend more to get their contracts enforced, which is a disincentive for their investments.

Accessing financial capital (especially credit) is less difficult in Kenya as compared to Uganda and Tanzania where there are no private credit bureau coverage. However, the proportion of private credit available in Kenya is much less, about 26% of GDP, as compared to South Africa, about 72%. The intermediation cost is relatively higher in Kenya (with an interest rate spread of about 13%, which is second to that of Tanzania of about 15%), as compared to South Africa with a spread of about 5%.

Table 9: Cost of doing business across selected countries

	Starting a business (2004)			Enforcing contracts details			Getting credit				Closing a business (2003)	
Country	No. of procedures	Duration (days)	US$ cost	No. of procedures	Duration (days)	Cost (% GNI per capita)	Private bureau coverage (borrowers per 1000 capita)	Private credit (% GDP)	Five bank concentration ratio (%)	Interest rate spread (%)	Actual time (years)	Actual cost (% of estate)
Kenya	12	47	223	25	255	49.5	309	25.69	57.00	12.94	4.6	18
Tanzania	13	35	514	14	127	3.8	0	4.66	72.60	15.47	3.0	8
Uganda	17	36	306	16	99	10	0	5.45	76.30	11.83	2.0	38
South Africa	9	38	358	26	207	16.7	469	72.17	74.90	5.08	2.0	18

Source: World Bank website: http://rru.worldbank.org/DoingBusiness

The major problem with investments in Kenya is that once the firms are established, it takes even longer (about five years) for firms that want to relocate to other regions to close their business as compared to an average of about two years for the other economies. However, the actual cost as a proportion of the entire estate is higher Uganda than in other economies. The longer duration taken to close a business may make foreign firms to avoid such economies in the wake of risk, though most FDI are not reversible.

d) Return on capital

The growth rate of capital formation has declined in Kenya from 6.25 in the year 1996 to -0.71 in 2002, while that for Uganda and Tanzania shows a general improvement over the same period (Table 10). This trend occured inspite of the fact that the size of these economies in terms of GDP values is lower than that of Kenya. For South Africa, the growth in capital formation may be attributed to the size of the market as captured by its high GDP values compared to the rest of the economies. The low level of capital may signal higher returns for capital in Kenya as compared to neighbouring countries. However, given where the two countries have come from, it is possible that they are at the moment experiencing higher return for investment than Kenya.

e) Market size and economic growth

A major factor that would explain the entry of horizontal FDI is market size and growth. Considering the GDP growth and level and investment rates, Table 10 shows that Kenya has performed poorly in terms of GDP growth, GDP per capita and domestic investment compared to neighbouring countries. The rate of GDP growth is higher in Uganda and Tanzania than Kenya and these two countries are performing better than South Africa in terms of GDP growth. This would, therefore, act as a disincentive for market-seeking FDI. Considering the population size, though, Kenya has a larger market and the GDP per capita indicates

that the purchasing power is also higher in Kenya. However, with more openness of the economies, serving the Kenyan market from another destination may be cheaper.

Table 10: Market size and growth across selected countries

Country/Year	Kenya	South Africa	Uganda	Tanzania
GDP growth (annual %)*				
Av. for 1990-1995	2.04	0.68	6.95	2.68
1996	4.15	4.31	9.07	4.56
1997	2.08	2.65	5.10	3.51
1998	1.62	0.75	4.91	3.71
1999	1.29	2.03	7.89	3.65
2000	-0.16	3.50	5.50	5.69
2001	1.13	2.83	5.05	6.08
2002	1.03	2.98	6.71	6.32
Gross Fixed Capital Formation (annual % growth)				
Av. for 1990-1995	3.62	0.57	9.39	-2.53
1996	6.25	9.01	9.86	-2.64
1997	-2.67	5.74	-1.73	0.41
1998	5.63	4.61	1.92	14.07
1999	-4.63	-8.07	15.85	-1.57
2000	-2.36	0.81	1.53	7.52
2001	0.92	3.20	1.46	5.85
2002	-0.71	6.51	9.41	2.44
Gross Fixed Capital Formation as % GDP				
Av. for 1990-1995	16.26	16.28	14.88	24.61
1996	16.20	16.28	16.68	16.47
1997	14.50	16.51	17.05	14.72
1998	16.41	16.96	15.70	13.67
1999	15.20	15.41	19.16	15.38
2000	14.62	14.85	19.48	17.43
2001	14.08	14.69	19.73	16.81
2002	13.12	15.14	21.27	16.52
Population (Millions)				
Av. for 1990-1995	25.02	37.12	18.89	27.54
1996	27.36	40	20.8	30.49
1997	28.04	40.93	21.35	31.32
1998	28.73	41.9	21.95	32.13
1999	29.42	42.92	22.58	32.92
2000	30.09	44	23.25	33.7
2001	30.74	44.81	23.93	34.45
2002	31.35	45.35	24.6	35.18
2003	31.92	45.83	25.28	35.89
GDP per capita growth (annual %)				
Av. for 1990-1995	-0.71	-1.41	3.52	-0.41
1996	1.58	2.01	6.33	1.67
1997	-0.40	0.32	2.36	0.77
1998	-0.80	-1.59	2.07	1.09
1999	-1.08	-0.40	4.88	1.14
2000	-2.48	0.96	2.45	3.29
2001	-0.99	0.96	2.09	3.76
2002	-0.93	1.77	3.78	4.11
GDP per capita in (US$)				
Av. for 1990-1995	342.85	3900.17	252.24	181.66
1996	344.32	3940.53	301.88	180.23
1997	342.96	3953.31	309.00	181.62
1998	340.23	3890.56	315.40	183.60
1999	336.54	3875.06	330.78	185.70
2000	328.44	3912.35	338.89	191.75
2001	325.20	3950.11	345.97	198.96
2002	322.16	4019.86	359.06	207.14

Source: WDI 2004 CD-ROM, World Bank

3. Literature Review

3.1 Introduction

Various theories have been advanced to understand the determinants of FDI flows. For example, theories advanced to explain FDI include Global Horizons Theory (GHT), International Product Cycle (IPC) and Internalization Theory (IT). The GHT identifies internal and external forces that make a firm go international, while the IPC suggests that firms undertake FDI at particular stages in the life cycle of products they have innovated. The IT suggests that vertical FDI enables firrns to reduce their exposure to the risks that arise from investments in specialized assets. These theories are based on motivation of the foreign investors to invest abroad, which are summarized as search for and to extract resources or raw materials, reduction in production costs, expansion of market scope, and bringing goods closer to their customers (Chakrabarti, 2001). Calhoun *et al.* (2002) observe two major motivations: host market motivated, whereby investment is motivated by the economic potential of the customer market within the country of destination, and export market motivated, whereby investment is for the purpose of establishing production facilities.

With these motivations, FDI is grouped into three different types: natural resource-securing type, market-securing type, and cost-saving type (Urata, 1997). The market-securing type or market-seeking type of FDI is driven by the size and growth of the host market. This is also referred to as horizontal FDI as it involves building duplicate plants in a foreign location to supply the market there. The idea is to reduce the cost involved in supplying the market, such as the tariffs and transport costs, or to become more competitive in other ways, such as through proximity to the market and being able to respond to the changing local circumstances and preferences. The cost-saving type or production cost minimizing FDI is also referred to as vertical FDI as it involves slicing

the vertical chain of production and relocating part of the chain in a low cost location. This type of FDI also encompasses the raw material seeking FDI, as the inexpensive input could be primary commodities or raw materials in a specific location. Other inexpensive input that may attract such FDI is the cost of labour, intermediate goods and even access to certain externalities. These FDI are export-oriented and, therefore, are unaffected by the market size of the host country.

There has also been consideration of international portfolio investments, which takes place either by direct purchase of foreign securities in the respective local (foreign) market of the issuer or by acquisition of securities whose value is closely linked to foreign shares such as equity-linked bonds. Under the Portfolio Theory (PT), investors consider the returns and risk in selecting their portfolio. The risks in international portfolio investment are mainly from unfavourable changes in exchange and interest rates, and regulatory environments. Apart from the inherent risks, institutional constraints might also limit the potential for international portfolio investments, for example constraints due to taxation, exchange controls, capital market regulations and transaction costs (Bartram and Dufey, 2001). In this case, element of uncertainty is taken into account. It is based on the observation that fluctuations in rates of return on capital within and between countries are not perfectly correlated, such that risks might be reduced by a diversification of portfolios. In such a case, having a mix of both domestic and foreign portfolios can lead to a reduction in risk. Some theories look at other fundamentals that may determine FDI. For instance, the Integrative Theory introduces the importance of institutions as a determinant of FDI by providing a link between the microeconomic variables and the macroeconomic variables. This theory was extended by the Institutional FDI Fitness Theory, which recognizes the specific institutions as government, markets, education and socio-culture.

Therefore, in analyzing the factors that influence FDI flow, one can look at the factors that influence the different types. For example, the location of natural resource-type is determined by the availability of natural resources, while the market-securing type is determined by the presence of sizable market as reflected by the size and/or income of the population. The cost-saving type that is undertaken by export-oriented foreign firms is determined by a production base where production can be performed at low cost. The size of the market of the host country and the potential demand of the local customers play a role in determining market-seeking investments while efficiency-seeking investments can be influenced by a comparative advantage of the host country in its cost and labour (Altomonte, 1998).

3.2 Factors determining FDI

Balasubramanyam (2001); Rogoff and Reinhart (2002); Ngowi (2001); UNCTAD (2003) and Makola (2003) summarise the various determinants of FDI flows to include: macroeconomic stability; transparency and stability of the policy framework; policy incentives including both the fiscal and monetary incentives; distortion of free market environment/effective competition policies; market size and growth; resource endowment; infrastructure; institutional factors including political, legal and regulatory factors and the global market interactions.

Recent studies have recognized the importance of other factors (other than the ones that have been seen to determine FDI - "traditional") "non-traditional" as important in explaining the flow of FDI within and between countries. Nunnenkamp (2002), for example, argues that the importance of traditional determinants and the types of FDI associated with them has declined with globalization, and that FDI in developing countries has shifted from market-seeking and resource-

seeking to more (vertical) efficiency-seeking FDI. Similarly, Biswas (2002) acknowledges that certain issues still remain to be explored regarding the determinants of FDI by a multinational corporation and the corporation's consequent choice of investment location. In this regard, they include both traditional (such as wage, infrastructure) and non-traditional (such as regime type, regime duration, property rights' issues) variables in the analysis of FDI flows.

a) FDI and non-traditional factors

i) Political risk

ICRG defines political risk to encompass various elements including government stability, law and order, internal and external conflicts, corruption and democratic accountability. It is important to note that provision of a secure environment for the attraction and further development of FDI is one of the major country's policy measures aimed at enhancing the attractiveness of the business environment. This is with recognition that even when a company has set up an operation, it remains exposed to changing conditions such as political risk, macroeconomic mismanagement, and other risks like war and labour unrest. Labour unrest can be in the form of the firm's own workforce or the workforce of the government infrastructure upon which a company relies (e. g. transportation networks) disrupting operations. Political risk may lead to expropriation, resulting into loss of assets or termination of operations, cancellation of agreements with the government (or forced negotiations), enactment of new laws that make doing business more expensive, currency conversion restrictions, and changes on Trade-Related Investment Measures (TRIMs) or equity participation rules. As noted by Altomonte (1998), profitability of each single investment takes into account uncertainty over the future rewards from the investment.

Nordal (2001) observes that a country's risk and especially political risk constitutes a large part of the total risk investors face when investing in

emerging markets. Moreover, Rogoff and Reinhart (2002) argue that an obvious and powerful deterrent to FDI is political instability, with wars forming an extremely large portion. While wars are likely deterrents to FDI, wars are also often a source of inflation, which also affects FDI flow. Edwards (1990) also found the political instability as statistically significant, irrespective of what other variables are included as regressors in cross-country regressions. Note that the inclusion of political risk or political instability as a determinant of FDI derives from the theory of transaction costs, according to which FDI is negatively affected by the risk of expropriation of investment by the host country's government, an effect that is higher than the political instability of the host country and, therefore, the higher is the sunk cost of the undertaken investment (Altomonte, 1998).

While some studies have used the political risk variable in its composite form, other studies have attempted to analyze the implications of the various components. For example, Busse (2003) uses cross-sectional and panel data analysis to look at the relationship between democracy and FDI. The results show that on average, investments by multinationals are significantly higher in democratic countries. Democracy is proxied by political rights and civil liberties indicators. Political rights enable people to participate freely in the political process, while civil liberties include the freedom to develop views, institutions, and personal autonomy without reference to the state. Rodrik (1996) regresses an indicator for democracy (and a number of control variables) on the value of investment by majority-owned US affiliates abroad, while Harms and Ursprung (2002) focuses on developing emerging market economies. Both studies have found out that MNEs are more likely to be attracted by countries in which democracy is respected, concluding that there is little evidence that weak democracies provide a haven for foreign investors. Busse (2003) expands on these studies by

taking longer time periods, considering the investment behaviour of MNEs in 1970s and 1980s.

Smarzynska and Wei (2000) analyze the implications of host country corruption on foreign investor's choice of entry mode, arguing that in an environment where corruption exists, there is a trade-off in using local partners. This is because corruption makes local bureaucracy less transparent and increases the value of using a local partner to cut through the bureaucratic maze. On the other hand, corruption decreases the effective protection of investor's intangible assets and lowers the probability that disputes between foreign and domestic partners will be adjudicated fairly, therefore reducing the value of having a local partner. They argue that corruption makes dealing with government officials less transparent and more costly, particularly for foreign investors. Globerman and Shapiro (2002) also point to governance as a major factor influencing the flow of FDI. Basing their argument on the "Eclectic" theory of FDI, they suggest that one factor contributing to a location's attractiveness for FDI is its national political infrastructure (where national political infrastructure consists of the political, institutional and legal environment). The study shows that national political infrastructure is an important determinant of FDI inflows and outflows. The results suggest that investment in governance infrastructure attracts capital and creates conditions under which domestic MNEs emerge and invest abroad.

There are very few studies that have looked at the relationship between crime and FDI specifically. Blomstrom and Kokko (2003) indicate that among the factors that potential investors look up for include the rule of law, strong and clearly defined property rights, degree of corruption, regulation and local bureaucracy and political stability. Similarly, Balasubramanyam (2001) indicates that the efficiency of legal institution is important not only in ensuring that there is proper enforcement of

contracts, but also in maintenance of law and order to ensure security of people and property. A well-functioning legal system also provides protection of intellectual property rights, which gives a competitive edge to most foreign direct investors, forming a capacity of providing credible commitment on the part of the state. In a situation where there are high risks of insecurity, a firm may operate in incremental steps by starting with a smaller investment and hold out the prospect of additional investments in the future if the government agrees to maintain a certain level of security. Further, Biswas (2002) uses the law and order and the expropriation indices as proxies for the security of property and contract rights and finds a positive and significant relationship at 1% level. This suggests that institutions that protect property rights are important to investment.

ii) FDI and infrastructure

Infrastructure setup in a country determines the investment climate by affecting either directly the establishment and operations of business and/or indirectly through increased operation costs compared to regions with better infrastructure. Balasubramanyam (2001) defines infrastructure facilities to include transportation and communications but also a favourable environment for work and leisure. Biswas (2002) asserts that the marginal effect of infrastructure on investment is positive and significant at 1% level, indicating that investors are attracted to a country with better infrastructure. Furthermore, Loungani *et al.* (2002) in their study, reveal that higher telephone densities in host and source countries enhance FDI flows.

b) FDI and traditional factors

i) Macroeconomic variables

The conditions for entry and the prospects for economies' growth also attract FDI as this defines the scope of the market. Inflows of FDI are,

therefore, likely to be higher in regions where investment growth rates are high than in regions with low growth rates, as this has implications on economic growth. Rogoff and Reinhart (2002), in looking at the role of price stability and currency instability on FDI in Africa, argue that without macroeconomic stability, the risk of doing business rises drastically, internal trade is significantly hampered, and external trade affected more. High and unpredictable inflation cripples business planning and checks the development of financial intermediation within the private sector. Ngowi (2001) reports that the strength of a currency determines FDI inflow, where a relatively weak currency is likely to attract more FDIs than a relatively strong one. Currency devaluation may lead to cheap assets, therefore, expected to attract more FDIs especially through Mergers and Acquisitions (M&As). However, Baer (2001) recognizes that capital inflows are often associated with an appreciation of the real exchange rate that squeeze out marginal domestic producers of tradable goods, sometimes leading to unemployment. He cautions that capital inflow has macroeconomic implications that can be problematic and, therefore, high level of FDI can lead to transient exchange rate overvaluation that can damage the tradable sector and expose the economy to disruptive currency depreciation when such inflows cease.

A distortion free environment is likely to offer a favourable environment for FDI inflow. Blomstrom and Kokko (2003) note that trade liberalization leads to increased market integration and reduces the importance of market size as a determinant of investment location, giving even a small country a chance to compete for FDI as long as it can provide a sufficiently attractive incentive package. Jacobs (2003) argues that an efficient and market-oriented institutional environment is needed to attract FDI and that the relative size of the export sector attracts FDI, with countries that export more attracting more FDI. He argues that reducing regulatory risk (the risk that the government will

change the rules of the market or will apply rules to benefit national incumbents) is critical in increasing investment inflows, particularly in infrastructure sectors characterized by long-term commitments, high sunk costs, and intricate property rights. He also argues that there will be higher levels of investment as the administrative environment becomes more transparent and efficient, since this reduces the start-up costs, operating costs and legal uncertainties due to complex or corrupt administrative environments.

Further, Ngowi (2001) notes that non-discriminatory treatment of investors, consistency and predictability in government policies are also among the determinants of FDI. The investors should be in a position where they can plan their activities within the policy environment of the government. The policies that directly or indirectly affect investments should be reliable, accessible, up-to-date and widely publicized. This is mainly to avoid the possibilities of uncertainty about the future relevance of the policies.

In the recent past, countries have put in place various incentives to make them competitive locations for FDI attraction. Blomstrom and Kokko (2003) indicate the various types of incentives used to attract FDI to include fiscal incentives such as tax holidays and lower taxes for foreign investors; financial incentives such as grants and preferential loans to MNCs; as well as measures like market preferences, infrastructure, and sometimes even monopoly rights. However, McGee (2003), looking at FDI in Southeastern Europe, notes that some countries attract foreign capital using tax incentives that are more effective in countries that have good infrastructure and the other attributes needed to attract FDI. Similarly, Blomstrom and Kokko (2003) indicate that in addition to investment incentives, governments should also modernize infrastructure, raise the education levels and labour skills, and improve the overall business climate as part of their investment policy.

Phillips *et al.* (2001) also note that investment incentives will only pay off once countries overcome their ethnic particularism and ensure that the fundamentals that attract investors are in place. These include access to resources; secure mobility of people, goods, information and capital into, around and out of the country; sound institutions – stable government, security of life and property, rule of law, etc; and alertness to international opportunities and obstacles as they appear. Ngowi (2001) recognizes that apart from the incentives being offered, the presence of investment opportunities in a country is also important. He argues that the opportunities should be made known to potential investors through effective promotion, which includes marketing a country and coordinating the supply of a country's immobile assets with the specific needs of targeted investors.

ii) FDI and availability of inputs

Resource-seeking FDI are mainly concerned with the availability of raw materials; they will locate to regions where raw materials are easily available, while vertical FDI look at the cost aspect. Therefore, the availability and cost of inputs is an important determinant of FDI location. Ngowi (2001) argues that labour market situation affects investment indicating that availability of labour at relatively low costs, high skills and efficiency is important for investment as it defines the cost of production. Further, Calhoun *et al.* (2002) note that in theory, as investing entities search for potential investment locations, preference is indicated in locations with lower wage rates to those with higher labour costs. However, Altomonte (1998) notes that literature has found mixed evidence for the significance of labour costs on the distribution of foreign investments. Feenstra and Hanson (1997) point out that low labour costs have large impact on US-owned assembly plants in Mexico while Wheeler and Mody (1992) find labour costs to be a significant influence on US electronic assembly manufacturers. However, Mody *et al.* (1998) find labour costs not to be an attractor of Japanese FDI,

although labour quality is. Similarly, Fung *et al.* (2000) reflect average wage costs to be insignificant but the labour quality significant for US and Japanese FDI in China. Globerman and Shapiro (2002) note that the absence of educated and healthy workers can be a deterrent to foreign entry, and that as increasing amounts of FDI becomes skill and efficiency-seeking, access to an educated and skilled workforce becomes essential. In their study, they use the Human Development Index (HDI) to capture the aspects of human capital development. Biswas (2002) find marginal negative effects of wages on investment, suggesting that low wages are not necessarily a crucial factor for investment.

4. Methodology

4.1 Analytical framework

The empirical analysis brings together traditional and non-traditional factors identified to influence FDI. The traditional variables include investment return, GDP, external debt and debt burden, openness, and literacy. Non-traditional variables include political risk, which is defined by government stability, law and order, internal and external conflicts, corruption and democratic accountability.

Specifically, the empirical model is defined as:

FDI = f(Investment return; Market size; Macroeconomic variables; Institutional factors; Infrastructure; Labour factors)

Table 11 gives a summary of the main proxies for measuring the determinants of FDI.

Table 11: Proxies for capturing different aspects in FDI analysis

	Hypothesis	Type of FDI	Proxy
Return on investment	The higher the return on capital, the higher the flow of FDI	All	• *The reciprocal of per capita GDP (RETURN)* • *Capital stock (CAP)*
Macroeconomic variables			
Market size	The larger the market size, the more the inflow, although with the openness, market size may not be relevant	Market-seeking	• *Log of population (LNPOP)* • *The ratio of domestic investment to GDP (DOMINV)* • *Log of GDP level (LNGDPLEVEL)* • *GDP growth rate (GDPGRO)*
Macro-stability	The higher the level of macro-instability, the higher the risk premium on investment and the lower the level of investment	Cost-saving	• *Inflation (INFLATE)* • *Ratio of export + imports to GDP (OPENNESS)*
External shocks	The more exposed the economy to external shocks, the more risky the environment	All	• *Ratio of debt to GDP (DEBTGDP) DEBTGDP squared (DEBGDP²)*
Infrastructure			
Communication	The lower the cost of communication, the higher the investment	All	•Log of telephone per 1,000 (*LNTELPOP*)
Labour			
Quality	The higher the quality of labour the higher the investment	Cost saving	•Literacy level (*LITERATE*)
Institutional risk factors			
Political risk	The lower the risk, the higher the investment	All	• Democracy (*DEMOACCT*) • Political rights (*POLITRIGHTS*) • Law and order (*LAW*) • Corruption (*CORRUPT*) • Government stability (*GOVTSTAB*)

4.2 Econometric method

The study uses panel data for analysis. The empirical model is then defined as follows:

$$Y_{it} = \alpha_i + \beta X_{it} + \mu_{it}$$

$$\mu_{it} \sim N(0, \sigma^2_{it})$$

$$i = 1, \ldots\ldots\ldots, N$$

$$t = 1, \ldots\ldots\ldots, T$$

where X_{it} is a vector of all the identified independent variables; Y is dependent variable; $\mu_{it}=\mu_i + \omega_t + \nu_{it}$; μ_i are unobservable individual specific effects, ω_t are the unobservable time effects, ν_{it} is a stochastic disturbance term, i is the observation (country) while t is the time period.

Panel data can be estimated using a pooled, random effects or a fixed effects model. In the pooled model, the data is put together and estimated using OLS without taking into consideration the difference across the cross-sections. This is aimed at bringing out the features of the data that may be lost when features of panel data are taken into account. In this case, the coefficient of the respective cross-sectional units is taken to be equal. The equality of cross-sectional coefficients is tested using the Chow test with a null that all the cross-sectional coefficients are equal. F-stat is (23.62(0. 000) and Chi-square is (214.95(0. 000)). From these test statistics, it is concluded that the cross-sectional coefficients are not equal and that there exists country-specific characteristics.

A variant of the pooled estimates is where the error term is decomposed into individual and unsystematic effects mainly to capture the effects lost by pooling. The individual effect, in this case, varies across individuals but constant across time while the unsystematic effect varies both across individuals and time. This formulation of panel data can be estimated in two ways, depending on whether the individual effects

are correlated to the explanatory variables or not. If the effects are uncorrelated to the explanatory variables, then OLS is used in the random effects model.

When the individual effects are correlated to the explanatory variables, then a fixed effects estimator is used. The fixed effects estimator is carried out by first transforming the variables of estimation by subtracting person-specific means and then running OLS on the transformed variables. If the variables are estimated with deviations from the mean, then the fixed effects are done away with by removing means of these variables across individual cross-sectional units. A Least-Square Dummy Variable (LSDV) can also be estimated. In this case, a different dummy variable for each individual unit is included to remove the fixed effects from the estimation and then the estimation is done using OLS.

A decision on whether to use a random or fixed effects model is arrived at by using the Hausman specification test. This test is mainly based on the consistency and efficiency of the random and fixed effects estimators depending on the correlation between the individual effects and the regressors. The Hausman specification is a Chi-square test of a null hypothesis that the difference in coefficients is not systematic (i. e. random effects) against an alternative of systematic difference in coefficients (i. e. case of fixed effects). The calculated $x^2 = 83.48$ is considered against the critical of 19.68 at 5% significance level and the null for a fixed effects model is rejected. This means that there are differences across the cross-sectional units that need to be captured.

The fixed effects panel estimation allows one to focus on changes within different units over time and remains unbiased even when data is missing for some time periods for some cross-sectional units. Given that the number of cross-sectional units in the sample is bigger compared to the time period and that there is unbalanced panel, the fixed effects model will be best appropriate in this case.

4.3 Data and measurement

4.3.1 *Measurement*

a) FDI

Some studies have measured FDI by using the logarithm of real FDI flows (Loungani *et al.*, 2002); natural log of FDI flows (Globerman and Shapiro, 2002); net inflows of FDI by region (Broadman and Recanatini, 2003) and FDI inflows per capita (Busse, 2003). This study uses the natural log of the ratio of FDI inflows to gross fixed capital formation (*LNFDI*).

$$\text{LNFDI} = \log\left(\frac{\textit{FDI inflows}}{\textit{Gross fixed capital formation}}\right)$$

b) Institutional variables

Countries with high quality institutions provide an environment both for investment attraction and expansion of existing firms since it offers a favourable environment for operation. Loungani *et al.* (2002) uses credit rating to measure the quality of institutions. Wilhelms (1998) uses ICRG index of corruption, risk of expropriation, law and order and bureaucracy quality to measure government fitness. Broadman and Recanatini (2003) use crime rate per region per 100,000 persons to capture the state of insecurity in Russia.

This study measures the quality of institutions using the political risk variables, including: political rights (*POLITRIGHTS*), internal conflict (*INTCONF*) and corruption (*CORRUPT*), government stability (*GOVSTAB*), socioeconomic conditions (*SOCIOECO*) and democracy and accountability (*DEMOACCT*). ICRG index of law and order (LAW) is used to proxy for the state of insecurity in a country. Actual data on crime is not easily available for most countries and only reported cases are used as estimates of crime, while in real sense, most crimes go unreported.

- *POLITRIGHTS* is an index by Freedom in the World Country Ratings measured on a scale of one to seven, with one representing the highest degree of freedom and seven the lowest. Countries experiencing high degree of freedom in terms of political rights (less rating) tend to have low political risk and, therefore, are likely to attract more investments, both domestic and foreign.

- *INTCONF* is an ICRG index that assesses the political violence in a country and its actual or potential impact on governance. It consists of three sub-components: civil war, terrorism/ political violence and civil disorder, each with a maximum score of four (very low risk) and a minimum score of zero (very high risk). The highest rating is given to countries where there is no armed opposition to the government and the government does not indulge in arbitrary violence, direct or indirect, against its people. The lowest rating, however, is given to a country embroiled in an on-going civil war.

- *CORRUPT* is an ICRG rating that measures the degree of corruption within the political system, and covers actual or potential corruption in the form of nepotism, excessive patronage and bribery. It reflects the extent of corruption among government officials in a country. The index is more concerned with actual or potential corruption in the form of patronage, nepotism, 'favour-for-favours', suspiciously close ties between politics and business, etc. The highest score is six points and a higher rate of corruption shows less risk.

- *GOVSTAB* is an ICRG risk rating that assesses both the government's ability to carry out its declared programme(s) and its ability to stay in office. It is a sum of three sub-components: government unity, legislative strength and popular

support, each with a maximum score of four points and a minimum score of zero points, with the highest score equating to very low risk. Investors, both domestic and foreign, are likely to have more confidence in stable governments since this reduces the uncertainties due to political risks. Therefore, a positive relationship is expected between this variable and FDI inflows.

- *SOCIOECO* is an ICRG risk rating that assesses the socioeconomic pressures at work in society that could constrain government action or fuel social dissatisfaction. It is a sum of three sub-components each with a maximum score of four points and a minimum score of zero with a score of four equating to very low risk. The sub-components include: unemployment, consumer confidence and poverty.
- *LAW* is the ICRG rule of law variable that measures the impartiality of the legal system and the extent to which the rule of law is enforced. This variable has two sub-components each comprising zero to three points, with a total of 6 points. The law sub-component assesses the strength and impartiality of the legal system while the order sub-component assesses popular observance of law.

A positive relationship is expected between FDI and *INTCONF*, *CORRUPT*, *GOVSTAB* and *LAW* while a negative relationship is expected with *POLITRIGHTS*. Low risk in terms of higher rating for *SOCIOECO* is likely to lead to higher investments due to say high purchasing powers. It may also discourage foreign investments since low unemployment risk will mean the costs of labour are high and, therefore, increase production costs. The resultant effect of this rating on FDI is indeterminate.

Table 12 shows the relationship between the institutional/risk variables. From the table, all the institutional variables from the ICRG measures are positively related. The ICRG indices, on the other hand, are negatively related to the Freedom House indices (i. e. political rights and civil liberty). This may be because of the way Freedom House indices are measured; the lowest value for these indices represent the highest degree of freedom and liberty, therefore, lowest risk, while for the ICRG indices, a lower value represent the highest risk level. Some of the variables are highly correlated, for instance, *INTCONF* with *EXTCONF*, *LAW* and *ETHNIC*, and *POLITRIGHTS* with *DEMOACCT* and *CIVILIB*. The high positive correlation between *LAW* and *INTCONF* is because *INTCONF* measures political violence and civil disorders and these are a reflection of non-observance of law. Internal conflicts are also most likely to result into ethnic tension. An economy with several bureaucratic procedures is also likely to promote corruption in order to make things move fast, therefore, the high correlation between the two variables.

c) *Rate of return on investment*

Investors prefer countries where they realize return on their investments. Therefore, FDI are likely to go to countries that pay a higher return on capital. Return on capital can be captured by the return on capital markets, but capital markets in developing countries are not well functioning; it therefore becomes difficult to capture this variable. With an assumption of a perfect market where the return on capital is equal to the marginal productivity of capital, it would be expected that regions where there is scarce capital would be having higher marginal productivity of capital and, therefore, higher returns. Asiedu (2002) uses the inverse of per capita GDP to measure the return on capital assuming that poor countries also tend to have low capital. Therefore, the higher the per capita GDP, the lower the return and, therefore, the lower the

Table 12: Relationship between the institutional variables

	GOVSTAB	INVPROF	SOCIOECO	INTCONF	EXTCONF	CORRUPT	MILITARY	RELIGION	LAW	ETHNIC	DEMOACCT	BUREAU	POLITRIGHTS
INVPROF	0.647(*0.000*)	1.000											
SOCIOECO	0.009(*0.815*)	0.330(*0.000*)	1.000										
INTCONF	0.285(*0.000*)	0.297(*0.000*)	0.330(*0.000*)	1.000									
EXTCONF	0.130(*0.001*)	0.150(*0.000*)	0.128(*0.001*)	0.532(*0.000*)	1.000								
CORRUPT	0.033(*0.381*)	0.122(*0.001*)	0.252(*0.000*)	0.387(*0.000*)	0.232(*0.000*)	1.000							
MILITARY	0.165(*0.000*)	0.336(*0.000*)	0.329(*0.000*)	0.578(*0.000*)	0.354(*0.000*)	0.435(*0.000*)	1.000						
RELIGION	0.014(*0.718*)	0.089(*0.020*)	0.095(*0.012*)	0.313(*0.000*)	0.326(*0.000*)	0.162(*0.000*)	0.285(*0.000*)	1.000					
LAW	0.364(*0.000*)	0.330(*0.000*)	0.342(*0.000*)	0.717(*0.000*)	0.376(*0.000*)	0.460(*0.000*)	0.492(*0.000*)	0.201(*0.000*)	1.000				
ETHNIC	0.262(*0.000*)	0.254(*0.000*)	0.167(*0.000*)	0.594(*0.000*)	0.419(*0.000*)	0.202(*0.000*)	0.391(*0.000*)	0.284(*0.000*)	0.474(*0.000*)	1.000			
DEMOACCT	0.160(*0.000*)	0.296(*0.000*)	0.194(*0.000*)	0.365(*0.000*)	0.320(*0.000*)	0.443(*0.000*)	0.516(*0.000*)	0.081(*0.034*)	0.355(*0.000*)	0.225(*0.000*)	1.000		
BUREAU	0.218(*0.000*)	0.287(*0.000*)	0.422(*0.000*)	0.383(*0.000*)	0.123(*0.001*)	0.529(*0.000*)	0.514(*0.000*)	0.037(*0.335*)	0.497(*0.000*)	0.206(*0.000*)	0.455(*0.000*)	1.000	
POLITRIGHTS	-0.070(*0.070*)	-0.208(*0.000*)	-0.104(*0.007*)	-0.254(*0.000*)	-0.235(*0.000*)	-0.280(*0.0000*	-0.431(*0.000*)	-0.260(*0.000*)	-0.195(*0.000*)	-0.208(*0.000*)	-0.638(*0.000*)	-0.259(*0.000*)	1.000
CIVILIB	-0.092(*0.017*)	-0.257(*0.000*)	-0.152(*0.000*)	-0.270(*0.000*)	-0.180(*0.000*)	-0.274(*0.000*)	-0.423(*0.000*)	-0.292(*0.000*)	-0.227(*0.000*)	-0.244(*0.000*)	-0.569(*0.000*)	-0.239(*0.000*)	0.848(*0.000*)

Note: Values in brackets are significance levels

investment. Another measure that is used is capital stock. Given that the return on capital is measured as the inverse of per capita GDP, then capital stock is given by the return times the capital formation. Simply put, capital formation is a ratio of per capita GDP. In such a formulation, it is expected that capital stock will be high in a higher return economy than in a lower return economy. The rate of return is measured as the inverse of real GDP (*RETURN*) while the capital stock (*CAP*) is measured as the ratio of gross fixed capital formation to real GDP. A positive relationship is expected between *RETURN* and *FDI*, and a negative relationship between *CAP* and *FDI*.

d) Market size and growth variables

Market size and growth potential is looked at in terms of per capita income. A large market implies the distribution costs will be lower when production and distribution facilities are cited in that market where, presumably, the bulk of seller's customers will be located. A clustering of other producers in the large market may also create or accentuate agglomeration economies that, in turn, lower costs for all producers present in that market (Globerman and Shapiro, 2002). A country with a large market will have a greater ability to consume the production capacity established by the inflows of FDI. Such a country will appear more attractive to potential investors and economies experiencing rapid growth provided by a better investment climate especially for the host market motivated by FDI (Calhoun *et al.*, 2002).

Globerman and Shapiro (2002) use natural log of GDP per capita. They note that the problem with this variable is that it is also an implicit measure of wage rates, since productivity levels are highly correlated with wage rates, and with GDP per capita. Since all other things are constant, higher wage rates will discourage inward FDI, which is likely to affect the sign of this variable to FDI flow. Busse (2003) uses the real growth rate of GNI per capita for market growth and potential, and

GNI per capita for market size. Smarzynska and Wei (2000) use logs of GDP and GDP per capita while other studies use the population size.

This study uses various proxies including the natural log of GDP (*LNGDPLEV*), GDP growth rate (*GDPGRO*), population (*LNPOP*) and domestic investment (*DOMINV*) to measure market size and growth potential. Looking at the correlation between these variables, a negative relationship is depicted between the *LNPOP* and *DOMINV* (-0.030(0.437)) but it is insignificant. Relationship is positive and significant between *LNGDPLEV* and *LNPOP* (0.754(0.000)). The high correlation coefficient may imply that either of the two can measure the market size in the host economy. Similarly, the correlation between *DOMINV* and *LNGDPLEV* is positive and significant (0.088(0.022)). The correlation between *GDPGRO* and other market size variables is positive and significant, for instance, between *GDPGRO* and *LNGDPLEV*, (0.112(0.004)), between *GDPGRO* and *DOMINV*, (0.282(0.000)), and between *GDPGRO* and *LNPOP*, (0.083(0.030)).

e) Macroeconomic variables

i) Openness to trade

More open economies are highly integrated to other economies and, therefore, the interaction and capital flows in and out of this type of economy is high. Openness to trade is measured by the ratio of trade (sum of imports and exports) to GDP (Busse, 2003; Globerman and Shapiro, 2002; Asiedu, 2002). Globerman and Shapiro (2002) argue that openness of an economy measured by trade flows, as a ratio of GDP is likely to be related to a host country's legal and political framework that in turn is supportive of business investment. Therefore, more open economies are likely to attract more foreign investment than less open economies. A positive relationship is expected between this variable and FDI. This study uses the ratio of the sum of imports and exports to GDP as a measure of openness (*OPENNESS*).

ii) External debt and debt burden

The amount of external debt held by an economy is likely to affect the levels of investment. Most economies borrow externally to finance their fiscal deficits. While high borrowing may signal the need to fill the foreign exchange gaps through foreign investments, it may also negatively affect the level of investments. This is because high amounts of debt held bring conditions of uncertainties with debt overhang signaling a fiscal crisis.

Countries with external debt have to service their debts, therefore crowding out government expenditure, and this may discourage investment by affecting government investments that is key to provision of infrastructure and other factors that can enhance investment. Debt is proxied by the ratio of debt to GDP (*DEBTGDP*), while debt overhang is captured by the square of this variable ($DEBTGDP^2$). Higher debt burden is expected to lead to low foreign investments, while higher debt may result in higher investment.

The amount of external debt (*DEBTGDP*) is positively related to *OPENNESS* (0. 361(0. 000)) and *DEBTGDP* and debt overhang ($DEBTGDP^2$) are positively correlated (0. 925(0. 000)).

iii) Macro-prices

Stability of the domestic market is very crucial to investors. The higher the level of macro-instability, the higher the risk premium changed on investment and the lower would be the level of investment. The study uses inflation (*INFLATION*) to proxy macro-stability.

f) State of infrastructure

An economy with well established infrastructure is likely to be more attractive to foreign investment inflow because it increases productivity of investments and, therefore, stimulates FDI flows. Loungani *et al.* (2002) use the log of telephone density of the countries to proxy for

state of infrastructure, with the density measured by the number of telephones per 1,000 people. Globerman and Shapiro (2002) use the logarithm of telephone density as a proxy while Calhoun *et al.* (2002) and Asiedu (2002) use telephones per 1,000 people. While telephones per 1,000 population are widely used to measure the state of infrastructure, it takes into account only the availability but not reliability of infrastructure (Asiedu, 2002).

Following the literature, the state of infrastructure is measured using telephones per 1,000 people (*TELPOP*). A positive relationship is expected between these variables and FDI.

g) Labour

Labour availability and low labour costs—measured by relative wage rates, lead to increase in FDI inflows of a country. This is because availability of labour at low costs will mean low production costs, therefore, making the firms more competitive against those operating in high wage countries. The higher the relative wage rates in a country compared to other countries, the lower the convenience of an efficiency-seeking FDI. Globerman and Shapiro (2002) use wages and salaries per employee in manufacturing as a proxy for labour.

The quality of the labour force available in a country is also important for the investors, with greater productivity expected from a better-educated and trained workforce. Higher quality of labour, often measured by education levels, would be expected to attract FDI inflows (Calhoun *et al.*, 2002). Calhoun *et al.* (2002) use illiteracy rate to measure labour quality.

Data on wages is not readily available for most countries and, therefore, the difficulty in capturing the cost aspect of labour. The quality of labour (*LITERATE*) is measured using the proportion of literate population aged 15 years and above. A positive relationship is expected between literacy rate and FDI.

4.3.2 *Data source*

The study covers developing countries for the period 1990 to 2000; these include African, Asian, Latin American, and Eastern Europe countries. The choice of countries and the period is based on the availability of consistent data. Countries that had a lot of data gaps were dropped from the study, reducing the sample size to 63.

Data used is collected from various sources. The FDI data is from the *World Investment Reports* and the UNCTAD website. Data on GDP, population, exports and imports is from *IFS CD-ROM*. Data on infrastructure, GDP per capita and capital formation are from the *World Development Indicators 2002 CD-ROM*. Data on debt and debt service is from *Global Development Finance 2002 CD-ROM*. ICRG indices from Political Risk Services Group and Political Rights Index from Freedom in the House for the risk variables are also used.

5. Estimation Results

5.1 Descriptive statistics

Summary statistics

Table 13 shows the mean of the variables of measurement both for the combined data and at the regional level. In terms of the risk variables, Africa, and specifically the sub-Saharan Africa (SSA) has the highest risk, recording low indices for internal conflicts, external conflicts, law and order, and high index for political rights (lowest freedom). The means of risk variables for Africa are also below the average mean for the sample. The risk due to external conflict may have increased due to the threat of terrorism, since Africa is considered more vulnerable than the rest of the regions. East Europe experiences the greatest risk in terms of government stability while Asia has the greatest socioeconomic risk, and this may be due to the high population size of most Asian countries, making them stand a higher chance of unemployment and poverty. While corruption is seen more as an African problem, the risk indices show that the risk due to corruption is higher in East Europe followed by Asia. The mean rate of return, which is an indirect proxy for risk, is higher in Africa than the rest of the economies and even much higher for SSA countries.

Africa relies more on external debt and this is depicted by the high mean for external debt to GDP for Africa, with a mean higher than one showing that the debt to African countries is higher than the performance of their economies, with most of this debt being in SSA countries. While this is the case, debt burden, as measured by debt service to total exports, is higher in Latin America compared to other economies. The performance of the African economies is low as shown by the means of the GDP per capita and GDP level, respectively. The level of domestic investment is low in Africa and especially in SSA, while it is highest in Asia. The infrastructure setup is more developed

Table 13: Mean values of the variables across the regions

	All countries	Africa	Asia	Latin America	East Europe	SSA	Kenya	Uganda
LNFDI	0.918	1.078	0.790	0.928	0.573	1.082	-0.733	-1.876
CAP	0.220	0.202	0.253	0.208	0.204	0.195	0.179	0.164
RETURN	1367.994	2369.884	1047.062	749.170	396.119	2761.354	2935.575	3410.508
GDPGRO	3.606	3.143	5.340	2.900	0.638	3.071	1.920	6.558
LNPOP	2.728	2.420	3.463	2.307	3.033	2.230	3.301	3.009
OPENNESS	0.667	0.603	0.737	0.672	0.672	0.602	0.630	0.310
DEBTGDP	0.801	1.008	0.507	0.864	0.428	1.116	0.803	0.689
DEBTGDP²	1.415	1.646	0.376	2.099	0.228	1.981	0.681	0.494
INFLATION	58.899	17.076	11.246	148.647	50.547	18.811	12.973	17.136
GOVSTAB	7.368	7.371	7.631	7.149	7.146	7.100	6.550	7.908
SOCIOECO	5.351	5.026	5.863	5.276	4.889	4.909	5.091	4.885
CORRUPT	3.066	2.981	3.175	2.853	4.389	3.003	2.697	2.591
LAW	3.413	3.087	3.877	3.091	4.897	2.950	3.061	3.152
POLITRIGHTS	3.538	4.420	3.626	2.759	2.030	4.139	5.910	5.182
LITERACY	0.745	0.592	0.775	0.839	0.984	0.602	9.768	0.617
TELPOP	124.175	28.149	225.072	115.037	215.358	22.325	10.118	2.991

in Asia and East Europe compared to other economies as shown by the means of telephone per capita. This means that Asia and East Europe can easily support investments unlike African countries.

Correlations

Table 14 gives the relationship between the variables, most of which are used in estimation. Most of the variables depict significant relationships. The second column shows the relationship between the dependent variable and the explanatory variables. The stock of FDI is positively related to openness, amount of debt, literacy, infrastructure, internal conflict, law and political rights variables. The rate of return is negatively related to the risk variables (except political rights index, due to the difference in measurement of the indices), based on the theory that risky investments have higher rate of return than non-risky ventures. CAP is positively related to the risk variables and to infrastructure, implying that investments will be higher in places with low risk and with good infrastructure.

Of importance in the table is the relationship between the explanatory variables. Some of the variables are highly correlated. For instance, literacy rate and the rate of return have a negative relationship (- 0.747). This can be attributed to the fact that literate population is generally more productive and efficient and this can lead to improvements in GDP. Since the rate of return is measured as the inverse of GDP, the relationship between these variables is likely to be negative. The level of domestic investment and capital stock are also highly correlated, at 0.950. This is because domestic investment leads to increase in fixed capital formation (especially where investments are for capital development), therefore, the relationship with capital stock. Given the high correlation between some of the variables and the inherent problem of multicollinearity, some of the highly correlated variables are dropped in the estimation.

5.2 Regression results

Table 15 provides the regression results. The first model considers the macroeconomic variables. It is well fitted and explains 47% of the variations in FDI. The second model considers the institutional variables while the third model combines both the macroeconomic variables and the institutional variables. Although the explanatory power of the model is high, some of the institutional variables are dropped.

a) Investment return

The hypothesis that investment flows where investment returns are high is tested here. Results show the expected negative sign, with the capital stock variable (*LNCAP*) and the size of the coefficient implying an elastic relationship. This implies that assuming a perfect competition, the higher the level of capital stock, the lower is the marginal productivity of capital and, therefore, the lower the investment return. Economies with low capital stock tend to attract more FDI. The mean *CAP* values

Table 14: Relationship between the estimation variables

	LNFDINST	CAP	RETURN	GDPGRO	LNPOP	OPENNESS	DEBTGDP	DEBTGDP2	INFLATION	GOVSTAB	SOCIOECO	CORRUPT	LAW	POLITRIGHTS	LITERACY
LNFDINST	1.000														
CAP	-0.092(0.017)	1.000													
RETURN	-0.207(0.000)	-0.179(0.000)	1.000												
GDPGRO	0.024(0.537)	0.248(0.000)	-0.015(0.699)	1.000											
LNPOP	-0.363(0.000)	-0.028(0.471)	0.071(0.063)	0.083(0.030)	1.000										
OPENNESS	0.446(0.000)	0.364(0.000)	-0.199(0.000)	0.073(0.064)	-0.520(0.000)	1.000									
DEBTGDP	0.147(0.000)	0.228(0.000)	0.353(0.000)	-0.111(0.006)	-0.414(0.000)	0.361(0.000)	1.000								
DEBTGDP2	0.068(0.097)	0.213(0.000)	0.230(0.000)	-0.073(0.072)	-0.304(0.000)	0.247(0.000)	0.925(0.000)	1.000							
INFLATION	-0.080(0.038)	-0.065(0.092)	-0.022(0.571)	-0.127(0.001)	0.020(0.592)	-0.069(0.077)	0.096(0.018)	0.139(0.001)	1.000						
GOVSTAB	0.311(0.000)	0.157(0.000)	-0.199(0.000)	0.119(0.002)	0.016(0.673)	0.157(0.000)	-0.151(0.000)	-0.129(0.001)	-0.137(0.000)	1.000					
SOCIOECO	0.006(0.874)	0.290(0.000)	-0.353(0.000)	0.245(0.000)	-0.023(0.553)	0.132(0.001)	-0.179(0.000)	-0.123(0.002)	-0.056(0.144)	0.009(0.815)	1.000				
CORRUPT	-0.067(0.083)	0.164(0.000)	-0.248(0.000)	0.035(0.353)	-0.104(0.006)	0.116(0.003)	0.075(0.062)	0.096(0.018)	0.094(0.013)	0.033(0.381)	0.252(0.000)	1.000			
LAW	0.061(0.113)	0.253(0.000)	-0.406(0.000)	0.122(0.001)	0.008(0.841)	0.134(0.001)	-0.241(0.000)	-0.182(0.000)	-0.086(0.023)	0.364(0.000)	0.342(0.000)	0.460(0.000)	1.000		
POLITRIGTS	0.081(0.037)	-0.004(0.910)	0.340(0.000)	0.026(0.504)	0.137(0.000)	0.054(0.168)	0.039(0.341)	0.015(0.715)	-0.056(0.148)	-0.070(0.070)	-0.104(0.007)	-0.280(0.000)	-0.195(0.000)	1.000	
LITERACY	0.250(0.000)	0.123(0.002)	-0.747(0.000)	-0.031(0.439)	-0.124(0.002)	0.256(0.000)	-0.185(0.000	-0.111(0.009)	0.029(0.475)	0.188(0.000)	0.196(0.000)	0.253(0.000)	0.346(0.000)	-0.349(0.000)	1.000
TELPOP	0.035(0.370)	0.174(0.000)	-0.481(0.000)	0.020(0.606)	-0.117(0.002)	0.174(0.000)	-0.209(0.000)	-0.138(0.001)	-0.046(0.230)	0.296(0.000)	0.298(0.000)	0.346(0.000)	0.473(0.000)	-0.350(0.000)	0.478(0.000)

Note: Values in brackets are significance levels

Table 15: Regression results from the fixed effects estimates

LN (FDI/GFCF)	**Model 1**	**Model 2**	**Model 3**
INTERCEPT	-26.3574(4.42)***	-0.0585(0.0263)*	-45.8578(7.60)***
LNCAP	-1.0429(8.36)***		-1.1750(10.27)***
LNRETURN	5.5056(3.27)**		11.7170(6.89)***
LNRETURN²	-0.5217(4.29)**		-0.9244(7.58)***
GDPGRO	1.0445(1.67)**		0.1926(0.0667)**
LNPOP	3.2815(8.54)***		1.7098(4.01)***
OPENNESS	6.9306(4.23)***		10.8679(7.24)***
DEBTGDP	4.8508(6.22)***		3.3668(4.81)**
DEBTGDP²	-2.0440(5.40)***		-1.3854(4.10)***
INFLATE	-0.1696(6.35)***		-0.0815(3.25)**
OPGDP	-0.5287(3.21)**		-1.0960(7.09)***
LAW		0.0924(2.09)**	0.0815(2.42)**
POLITRIGHTS		-0.0771(2.53)**	
GOVSTAB		0.0915(6.53)***	0.0444(2.78)***
CORRUPT		-0.2560(5.94)***	-0.2010(4.26)**
SOCIOECO		-0.0779(3.43)***	
INTCONF		-0.0500(2.28)*	
MILITARY		-0.0829(2.17)**	
RELIGION		0.0914(1.95)*	0.0995(2.35)**
DEMOACCT		0.0147(5.08)***	0.1498(5.69)***
ETHNIC		0.0103(2.61)**	
TELPOP			0.0044(8.16)***
CORRUPTSSA			0.2295(2.52)**
R^2	0.4712	0.3183	0.5988
F-statistics	43.75(0.000)	27.73(0.000)	42.41(0.000)
F-test	23.25(0.000)	31.75(0.000)	23.91(0.000)

indicate that Kenya has a higher level of capital stock compared to, for example, Uganda, but not as high as other SSA countries. However, there is an increasing tendency for Uganda and Tanzania to continue attracting FDI while Kenya is still experiencing a declining trend as FDI flows reduce. The implication is that both Uganda and Tanzania have not hit the optimal capital stock accumulation. The study tested for non-linear relationship with *LNCAP*-squared, but the results were insignificant.

The *RETURN* variable is positive and elastic. The test for non-linearity indicates that increased investment returns do not continue to attract more FDI. There is an optimal level of FDI flow with regard to investment return. This explains why Uganda and Tanzania are experiencing high FDI with rising capital stock as investment returns remain unexhausted. This implies that the future for Kenya in reverting the situation depends on the two countries attaining the optimal FDI or starting to experience diminishing returns, or Kenya having a shift in the trigger point.

b) Macroeconomic variables

FDI is expected to flow where market size is large and growing. Results of this study show a positive but inelastic relationship between FDI and GDP growth rate. This implies that economic growth attracts FDI, especially the market-seeking FDI. This explains why Kenya has been losing to the neighbouring countries that are experiencing high GDP growth rate.

Measuring the market size using population, the results show that growth in population influences positively, the flow of FDI. Both Uganda and Tanzania are experiencing growing population, with Tanzania sharing the highest proportion of EA countries population.

Macroeconomic stability is crucial in enhancing FDI. The negative relationship indicates that when price stability is not maintained, FDI flows are constrained. Kenya has been experiencing a rising inflation rate in the period of this study.

Further, the more open the economy is, the more it attracts FDI. But having an open economy and no economic growth will see the FDI move and serve the economy from outside, especially if openness means reducing transaction costs faced with a closed economy.

A high debt level does not discourage FDI flows. However, an increasing debt burden curtails the flow of FDI. External debt, generally, is used to ease the fiscal constraints and in most cases, ease capital expenditure in provision of conducive environment for investments.

c) Institutional factors

A risky environment discourages investments by either reducing the investment return or leading to a precautionary behaviour by avoidance of risk. Where law and order is observed, growth in FDI inflow is higher. For the SSA, there is more gain in FDI when law and order is improved. It means that a 100% gain in law and order rating increases the FDI flow by 8.2%. This further implies that with a rating of two, Kenya requires to improve its rating to four to achieve 8.2% growth in FDI inflows. If the reported crimes are anything to go by, it means cutting down the number of reported crimes by 50%. The highest rating for law and order is six points. If Kenya is to achieve that, it would realize 13% growth in FDI flows.

Government stability has the expected positive sign. It means that the more confidence the investors have on government's ability to pursue its policy, the more the inflow of FDI. It, therefore, implies that it is important to enhance government unity, legislative strength and popular support. This reduced uncertainty is attributable to reduced

political risk. A 100% improvement, which translates to improving the rating to ten points, would see FDI increase by 4.4%. By mid year 2005, the rating had gone down to five points as compared to ten points in the first half of the year 2003 when the new government came into power, and enjoying more public confidence.

Democracy is crucial for investment purposes. The variable measures the responsiveness of the government to its people, on the basis that the less responsive it is, the more likely it is that the government will fall peacefully in a democratic society, but possibly violently in a non-democratic one. At the moment, the Kenyan government has a rating of 4.5 points and, therefore, requires 1.5 points to get the highest point of a democratic government. This means a 30% change in democratic rating, which gives the economy a 0.4% FDI.

Corruption has an unexpected negative sign. However, considering the SSA dummy, the results show that rising corruption in SSA discourages FDI flows. It indicates that with an increasing deterioration of corruption by one unit, SSA is losing 0.23% more of FDI compared to other regions. By the end of the year 2003, SSA was sharing 1.7% of the total FDI flows, which was a decline by 4.3% from the year 2001. This means that for SSA to increase its share of FDI by 23%, it must improve its rating by 100%, therefore, gain the highest score in corruption index. This would also mean that Kenya's rating must also improve by 100% to at least remain in the present position. It is important to note that because of Kenya failing to improve on its corruption issues, it faced suspension of structural adjustment funding in the year 1997, and this saw the flow of external resources come down. Therefore, Kenya has had a double suffering because of corruption.

6. Conclusions and Policy Implications

Institutional factors are important in attracting FDI. To attain the best rating for Kenya, it means 200% improvement in law and order, 140% improvement in government stability, 100% improvement on socioeconomic status and 30% improvement on democratic status. This will allow FDI flow to increase by between 0.4% and 23%. Therefore, the Kenya government should put a lot of resources to curb crime and restore law and order, embrace positive democratic practices, maintain its stability and embrace zero-tolerance on corruption more emphatically to gain substantially in investment growth and more so in FDI flows.

While debt in itself does not constrain FDI flows, debt burden is not conducive. At the moment, the ratio of total debt to GDP is 30%, while the interest payment ratio is 6.9%, which is far above the GDP growth rate of 4.3%. This gives a signal that the current debt burden is high and not sustainable. Therefore, while Kenya requires external resources to boost public investment, it is important that the flows are efficiently utilized to promote investment and economic growth.

Openness of the economy is crucial in investment growth. At the moment, the level of openness of Kenyan economy measured by the ratio of export plus imports to GDP is 48%. If with the export-led growth strategy, the economy was to raise the level of openness by between 10% to 52%, it means that FDI flow rate would rise by 100% of its present rate. However, if this is not accompanied by economic growth, it means loosing by 10%. This is possible, especially if the pull factors are not tightened as the initial constraints are relaxed. Therefore, it is important to accompany the openness with a conducive investment climate to sustain the flow of FDI.

GDP growth is a pull factor for FDI. At the time of the study, the economy was growing at an average rate of 2%. The results show that gaining a 100% increase in GDP growth would increase FDI by 19%.

Presently, the GDP growth rate is recorded at 4.3%, which is a 100% increase from the average of the past five years. If this is sustained, the economy will experience an increase in FDI flows of 19%. It also complements openness of the economy in attracting FDI.

With a significant inflation factor, it means that maintaining price stability is very crucial. At the moment, the Kenyan economy is experiencing 11% inflation. By attaining and sustaining the 5% level inflation,which has been the target for the economy in the last decade, the economy could realize 8% rise in FDI flows.

Corruption discourages investors because of the increased transaction costs. The results show that if the present efforts of dealing with corruption in Kenya were to improve the rating by 100%, that is gaining an extra 3 points, the country could attract about 23% of FDI. However, this change alone is only enough to maintain the Kenyan position at its present level. For it to gain more share in the SSA, it needs to ensure that other pull factors are taken care of. Gaining in corruption is also crucial for Kenya, as it will increase the flow of external resources that are crucial for enhancing the investment climate.

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Appendix

Appendix Table 1A: Largest three home-based TNCs, largest three foreign affiliates of home-based TNCs and largest three affiliates of foreign TNCs in Uganda

Company	Host/home economy	Industry	Sales	Employees
A. Industrial				
a) Largest home-based TNCs, 2002 (Millions of dollars and number)				
..	..	..	..	..
b) Largest affiliates of home-based TNCs, 2002 (Millions of dollars and number)				
..	..	..	..	..
c) Largest affiliates of foreign TNCs in the host-economy, 2002 (Millions of dollars and number)				
Uganda Breweries	Kenya	Beverages	328.3	1 000
Uganda Bata Shoe Company	Switzerland	Textile	2	165
General Mouldings	Kenya	Chemicals	0.1	45
B. Tertiary				
a) Largest home-based TNCs, 2002 (Millions of dollars and number)				
..	..	..	..	..
b) Largest affiliates of home-based TNCs, 2002 (Millions of dollars and number)				
..	..	..	..	..
c) Largest affiliates of foreign TNCs in the host-economy, 2002 (Millions of dollars and number)				
Cal Uganda	United Kingdom	Trade	3.6	23
Abacus Pharma	India	Trade	2.9	9
Transpaper	Kenya	Trade	2	35
C. Finance and Insurance Assets Employees				
a) Largest home-based TNCs, 2002 (Millions of dollars and number)				
..	..	..	..	..
b) Largest affiliates of home-based TNCs, 2002 (Millions of dollars and number)				
..	..	..	..	..
c) Largest affiliates of foreign TNCs in the host-economy, 2002 (Millions of dollars and number)				
Standard Chartered Bank Uganda	United Kingdom	Finance	269	113[a]
Stanbic Bank Uganda	South Africa	Finance	133.8	99[b]
Barclays Bank of Uganda	United Kingdom	Finance	104.5	146[a]

Source: UNCTAD Country Brief

[a] Data refer to 2001. [b] Data refer to 2000.

Appendix Table 1B: Largest affiliates of foreign TNCs in the host economy (Uganda), 2002 (Millions of dollars and number)

Company	Host/home economy	Industry	Sales	Employees
A. Industrial				
Uganda Breweries	Kenya	Beverages	328.3	1, 000
Uganda Bata Shoe Company	Switzerland	Textile	2	165
General Mouldings	Kenya	Chemicals	0.1	45
Hima Cement	France	Non-metallic mineral products	..	350
Uganda Grain Milling Co.	Kenya	Food	..	120
Western Highland Creameries	India	Agriculture	..	40
Sadolin Paints Uganda	Hong Kong	Chemicals	..	23
British American Tobacco	United Kingdom	Tobacco	..	..
Macnaughton	United Kingdom	Chemicals	..	..
Henkel Polymer Company	Germany	Chemicals	..	..
B. Tertiary				
Cal Uganda	United Kingdom	Trade	3.6	23
Abacus Pharma	India	Trade	2.9	9
Transpaper	Kenya	Trade	2.0	3.5
Energo Uganda Company	Yugoslavia	Other business services	0.6	300
Car & General	Kenya	Trade	0.3	18
Interfreight Forwarders	Switzerland	Transport	..	380
M T N	South Africa	Telecommunications	..	200
The Cooper Motor Corporation	Kenya	Trade	..	80
Lonrho Motors Uganda	Kenya	Trade	..	52
Achelis Uganda	Germany	Trade	..	30
Agro Machinery	India	Trade	..	24
Nobel Health	India	Trade	..	8
Joh Hansen And Soehne	Germany	Trade	..	6
Aes Nile Power	United States	Construction	..	..
Impregilo Salin Joint Venture	Italy	Construction	..	..
C. Finance and Insurance	Assets	Employees		
Stan. Chartered Bank Uganda	United Kingdom	Finance	269	113[a]
Stanbic Bank Uganda	South Africa	Finance	133.8	99[b]
Barclays Bank of Uganda	United Kingdom	Finance	104.5	146[a]
Bank of Baroda	India	Finance	47.5	180[b]
DFCU Bank	Germany	Finance	20.2	95[b]
Kuehne and Nagel Uganda	Switzerland	Finance	..	..
Studentwatchout.Co.UK	United Kingdom	Insurance	..	..

Sources: The Banker's Almanac, 2003 (London, Reed Information Services, 2003); Thomson Analytics (http://analytics.thomsonib.com/); Who Owns Whom, 2003 (London, Dun and Bradstreet, 2003).

[a] December 2001, [b] December 2000

Table 1C: Largest three home-based TNCs, largest three foreign affiliates of home-based TNCs and largest three affiliates of foreign TNCs in Tanzania

Company	Host/home economy	Industry	Sales	Employees
A. Industrial				
a) Largest home-based TNCs				
..	..	..	..	..
b) Largest affiliates of home-based TNCs, 2002 (Millions of dollars and number)				
..	..	..	..	..
c) Largest affiliates of foreign TNCs in the host economy, 1998 (Millions of dollars and number)				
Ashanti Goldfields (Tanzania) Ltd	Ghana	Mining	284.40[a]	20[a]
Tanzania Breweries Ltd (South African Breweries)	South Africa	Beverages	185.85	1,266
Japan Cigarettes Company Ltd (Japan Tobacco International)	Japan	Tobacco	107.1	773
B. Tertiary				
a) Largest home-based TNCs, 2000 (Millions of dollars and number)				
Planatel Communication Ltd	United Republic of Tanzania	Telecoms	..	..
b) Largest affiliates of home-based TNCs				
..	..	..	..	..
c) Largest affiliates of foreign TNCs in the host economy, 1998 (Millions of dollars and number)				
Total Tanzania Ltd	France	Distributive trade	32.7	88
Comps. & Telecoms Sys (Tanzania)	United Kingdom	Computer & related activities	4.21	105
Service and Computer Industries Ltd	Kenya	Computer & related activities	0.7	33[a]
C. Finance and Insurance Assets Employees				
a) Largest home-based TNCs				
..	..	..	..	..
b) Largest affiliates of home-based TNCs				
..	..	..	..	..
c) Largest affiliates of foreign TNCs in the host economy, 1998 (Millions of dollars and number)				
NBC (1997) Ltd (Amalgamated Bank of South Africa)	South Africa	Banking	385.4	1,100
East African Development Bank	Uganda	Banking	151.1	..
Stanbic Bank Tanzania Ltd	South Africa	Banking	140.5	159

Source: UNCTAD Country Brief

[a] Data refer to 1999. [b] Data refer to 1997

Table 1D: Largest affiliates of foreign TNCs in the host economy (Tanzania), 2002 (Millions of US$ and number)

Company	Host/home economy	Industry	Sales	Employees
A. Industrial				
Ashanti Goldfields (Tanzania) Ltd	Ghana	Mining	284.40[a]	20[a]
Tanzania Breweries Ltd. (South African Breweries)	South Africa	Beverages	185.9	1,266
Tanzania Cigarettes Company Ltd. (Japan Tobacco International)	Japan	Tobacco	107.1	773
Mic Tanzania Ltd	Luxembourg	Electrical & electronic equipment	19.2[a]	150[a]
Henkel Chemicals East Africa Ltd	Germany	Chemicals	0.5[a]	100[a]
Brooke Bond Tanzania Ltd	United Kingdom	Food	..	7,700[a]
Tanganyika Wattle Co Ltd	United Kingdom	Wood & wood products	..	1,500[a]
Body Care Ltd	United States	Chemicals	..	850[a]
Aluminium Africa Ltd	Bermuda	Metal & metal products	..	550[b]
Kahama Mining Corporation Ltd	Canada	Mining		200[a]
HK Foam	India	Transport equipment	..	72[a]
Jos. Hansen & Soehne (Tanzania) Ltd	Germany	Machinery & equipment	..	50[a]
Elvira Mineral Water Company Ltd	Kenya	Beverages	..	30[a]
Wellcome Tanzania Ltd	United Kingdom	Chemicals	..	7[a]
Glaxo Wellcome Tanzania Ltd	United Kingdom	Chemicals	..	4[a]
B. Tertiary				
Total Tanzania Ltd	France	Distributive trade	32.7	88
Computers & Telecoms Systems (Tanzania) Ltd	United Kingdom	Computer & related activities	4.2	105
Service and Computer Industries Ltd	Kenya	Computer & related activities	0.7	33
Achelis (Tanganyika) Ltd	Germany	Distributive trade	0.4[a]	35[a]
Interfreight (Tanzania) Ltd	Switzerland	Transport	..	150[a]
Sdv Notco (Tanzania) Ltd	France	Transport	..	130[a]
Tri Telecommunication Ltd	Malaysia	Telecommunications	..	120[a]
Keko Pharmaceutical Industry (1997) Ltd	France	Distributive trade	..	22[a]
C Mehta and Company Tanzania Ltd	Kenya	Distributive trade	..	20[a]
C. Finance and Insurance				
NBC (1997) Limited (Amalgamated Bank of South Africa)	South Africa	Banking	385.4	1,100
East African Development Bank	Uganda	Banking	151.1	..
Stanbic Bank Tanzania Ltd	South Africa	Banking	140.5	159
Delphis Bank	Kenya	Banking	..	90[a]
Eurafrican Bank Tanzania Ltd	Belgium	Banking	..	43

Sources: The Banker's Almanac, 2003 (London, Reed Information Services Ltd., 2003); Who Owns Whom: Australasia, Asia, Middle East & Africa, 2003 (United Kingdom, Dun and Bradstreet Ltd., 2003); Dun and Bradstreet Ltd., Who Owns Whom CD ROM (London, Dun and Bradstreet Ltd., 2003); Major Companies of Africa, South of the Sahara 2000 (Graham & Whiteside Limited, 2003), Business Registration and Licensing Agency (BRELA), Tanzanian Investment Centre and Zanzibar Investment Promotion Agency (ZIPA)

[a] Data refer to 1999. [b] Data refer to 1997

Appendix Table 2: Institutional characteristics in Kenya (1985-2005)

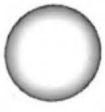
	Government Stability	Investment Profile	Socio economic conditions	Internal conflict	External conflict	Corruption	Military in politics	Religion in politics	Law and order	Ethnic tensions	Democratic accountability	Bureaucracy quality
1985	7.750	6.750	7.000	6.000	8.000	3.000	3.000	5.417	4.000	2.000	3.000	2.750
1986	7.083	7.000	7.000	6.000	8.000	3.000	3.000	5.000	4.000	2.000	3.000	3.000
1987	5.417	6.667	6.417	6.000	7.417	3.000	3.000	5.000	4.000	2.000	3.000	3.000
1988	6.167	6.500	6.000	6.500	6.000	3.000	3.000	5.000	4.000	1.583	3.000	3.000
1989	5.417	6.667	6.083	7.000	7.000	3.000	3.000	5.000	4.000	1.000	3.000	3.000
1990	4.500	6.500	6.333	6.250	7.000	3.000	3.000	5.000	3.000	1.000	3.000	3.000
1991	4.000	5.417	5.583	6.000	7.000	3.000	3.000	5.000	3.000	1.000	2.667	3.000
1992	4.250	6.417	6.000	6.500	10.000	3.000	5.000	4.000	3.000	1.667	2.917	3.000
1993	5.000	5.500	5.500	9.500	10.667	3.000	5.000	4.667	3.000	3.583	3.667	3.000
1994	5.583	5.000	5.417	10.250	12.000	3.000	5.000	5.000	3.500	3.917	4.000	3.000
1995	5.500	5.000	6.000	10.667	12.000	3.000	5.000	5.000	4.000	4.000	4.583	3.000
1996	6.333	5.000	5.667	11.000	12.000	3.000	5.000	4.750	4.000	4.000	4.167	3.000
1997	8.417	6.167	4.000	9.167	12.000	2.667	4.500	4.000	4.000	4.000	3.167	2.583
1998	9.917	7.000	4.000	5.417	11.917	2.000	3.000	3.750	2.167	3.167	2.917	2.000
1999	9.583	6.583	4.000	7.000	9.250	2.000	3.000	3.000	2.000	2.250	3.000	2.000
2000	9.000	6.333	3.500	7.500	7.583	2.000	3.000	3.000	2.000	2.000	3.000	2.000
2001	9.583	8.500	2.125	9.167	9.500	2.000	3.000	2.708	2.000	2.000	3.000	2.000
2002	8.417	9.000	1.500	8.333	9.500	2.167	3.000	1.500	1.583	1.708	3.000	2.000
2003	9.750	9.417	2.000	8.792	10.292	3.458	3.750	2.542	1.958	2.292	4.750	2.000
2004	7.875	9.500	2.000	9.458	10.500	2.500	4.000	3.917	2.000	2.917	4.500	2.000
2005	5.200	9.500	2.000	9.500	10.500	1.100	4.000	4.000	2.100	3.000	4.500	2.000

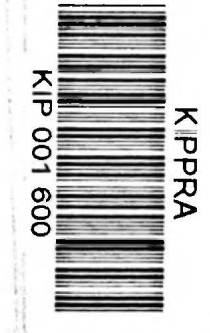
Source: ICRG Ratings, PRS Group

NOTE: The indicators are annual averages of the monthly indicators except for the year 2005 where the indicators are averaged up to May.

Appendix Table 3: Countries covered in the study in alphabetical order (a total of 63 countries)

Algeria
Argentina
Bahrain
Bangladesh
Bolivia
Botswana
Brazil
Bulgaria
Burkina Faso
Chile
China
Colombia
Congo
Cyprus
Dominican Republic
Ecuador
Egypt
Ghana
Guatemala
Guinea-Bissau
Guyana
Haiti
Honduras
Hungary
India
Indonesia
Israel
Jamaica
Japan
Jordan
Kenya
Korea, South
Madagascar
Malaysia
Mali
Mexico
Morocco
Mozambique
Myanmar
Namibia
Nicaragua
Nigeria
Pakistan
Panama
Paraguay
Peru
Philippines
Poland
Romania
Senegal
Singapore
South Africa
Sri Lanka
Thailand
Togo
Tunisia
Turkey
Uganda
Uruguay
Venezuela
Yemen
Zambia
Zimbabwe





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