Investment Climate and Foreign Direct Investment in Africa*

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Abstract

This paper investigates the relationship between investment climate in particular the prevailing business regulations, and foreign direct investment (FDI) in Africa. As most FDI in Africa go to the resource seeking investments and benefits only a handful of countries, in particular the oil producing countries, the study shows that the small, non-resource country in Africa can increase their chance of attracting the much needed FDI to support development, if they would institute reforms that will improve the investment climate in their country through improving the business regulations that promotes friendly business environment. An empirical model was estimated using business regulations variable as one of the regressors among the other controlled variables. Indeed, the study found evidence that business rules and regulations are important in attracting FDI in Africa. This result counters the common perception that FDI in Africa is solely determined by the natural resource endowment. This has important policy implications given the importance of FDI for growth and employment and the fact that many African countries are embarking on costly regulatory and bureaucratic reforms to improve the investment climate without any guarantees of increased FDI inflows.

Key words: Foreign direct investments, business environment, investment climate, business regulations

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1. Introduction

A favourable business environment is believed to be important for both domestic and foreign investment and for the development of the private sector—the engine of economic growth. This is supported by a growing consensus in economic literature that, specifically, the attractiveness of a given country as a host to foreign investors is determined not only by its comparative advantage in international production but also by its domestic investment climate. According to Athukorala (2009) "investment climate" in a broader sense involve both the foreign investment regime and the general investment environment. The former deals with the rules governing foreign investment and specific incentives for investors; and the latter encompasses various considerations impinging on investment decisions such as political stability, macroeconomic environment and attitudes of host countries towards foreign enterprise participation.

Given the potential of foreign direct investments (FDI) to accelerate growth and economic transformation, governments everywhere strive to improve their business environment or investment climate to attract these much needed resources for development. In this regard, many African countries are making an effort and implementing policy measures to increase their share of FDI inflows which they view as critical to resource mobilization, financial market development, and pro-poor economic growth. In turn, several of them have sought to implement policies designed to attract FDI to non-mining or non-extractive sectors, including services, telecommunication, transport, manufacturing, finance, and food production. For instance the World Bank's *Doing Business 2010* ranked Rwanda as the world leader in *doing business reforms*. One interesting question that remains is whether the determinants of FDI in the classic sense, including a more favourable business environment, apply to African countries given the peculiarities of their economies and levels of development.

Empirical observations suggest that the most important factor of FDI attractiveness in Africa is the endowment with natural resources. Most of the FDI in Africa go to resource-seeking investments compared to the market- and efficiency-seeking FDI in Asia[1]. Oil producing countries such as Angola, Nigeria, Libya, Algeria and Sudan are among the top FDI destinations in the region. Moreover, from the investors' side, for instance, American FDI flows have been found to be concentrated in the petroleum and mineral sector within many African countries (Nnadozie and Okonkwo Osili, 2005). The problem is that FDI inflows within the primary extraction sector is capital intensive, which have few linkages with other sectors of the economy and, in general, has not spurred pro-poor economic growth.

As African countries invest more of their limited public resources to reform and improve the business environment and as they embark on such costly mechanisms as the African Peer Review Mechanism (APRM) or the OECDs Policy Framework for Investment, it is important to ask whether they are reaping the expected benefits in terms of increased FDI flows. In

[1] Resource-seeking investments seek the supply of natural resources; market-seeking investments seek large domestic market; and efficiency-seeking FDIs seek to reduce production costs and strengthen link to the global market (Mottaleb and kalirajan 2010).

other words, if the key driver of FDI inflows to Africa is mineral resource endowment, does it still make sense for African countries to invest in improving their business environment? Put in another way, how important is the business environment to FDI in Africa countries? Should African countries improve their business environment to attract more FDI if the latter is not responsive to such improvements?

The main objective of this study is primarily to investigate whether business environment specifically government regulations that facilitate the ease of doing business matters for FDI inflows in Africa. In many of the existing studies on the determinants of FDI particularly for Africa, the role of business environment or investment climate as factor in attracting FDI was not fully investigated. In this study, an empirical model was estimated using business regulatory ratings and the variables that describe the general business environment, as some of the explanatory variables among other controlled or traditional variables that explain FDI.

The paper is structure as follows: Following this introduction, Section 2 describes the patterns and trends of FDI in Africa; Section 3 looks at the relationship between investment climate and FDI; Section 4 presents the current business environment in Africa and briefly discusses the general reforms made by the African countries; Section 5 investigates whether business environment and the general investment climate influence FDI inflows in Africa using an empirical model; and Section 6 concludes the paper.

2. Patterns and Trends of FDI Inflows in Africa

Although Stigitz (2002) argues that FDI could be harmful to a developing country because it may create dual economies or give rise to Dutch disease, or undermine democratic principles through its corrupting impact and associated influence peddling the literature on FDI overwhelmingly propound its macroeconomic benefits. Hence, FDI is found to be more stable and "less volatile (as measured by the coefficient of variation) than commercial bank loans and foreign portfolio flows" (World Bank, 1999) and had direct and indirect positive employment effect in manufacturing and service (Haddad & Harrison 1993; Lal 1995; and Chitraker & Weiss 1995). FDI also is believed to accelerate productivity growth (Aitken and Harrison 1999) and lead to increased economic growth and a positive spillover from transferring technology to domestic firms (Caves 1982; Helleiner 1989; Ozawa 1992; and Haddad & Harrison 1993).

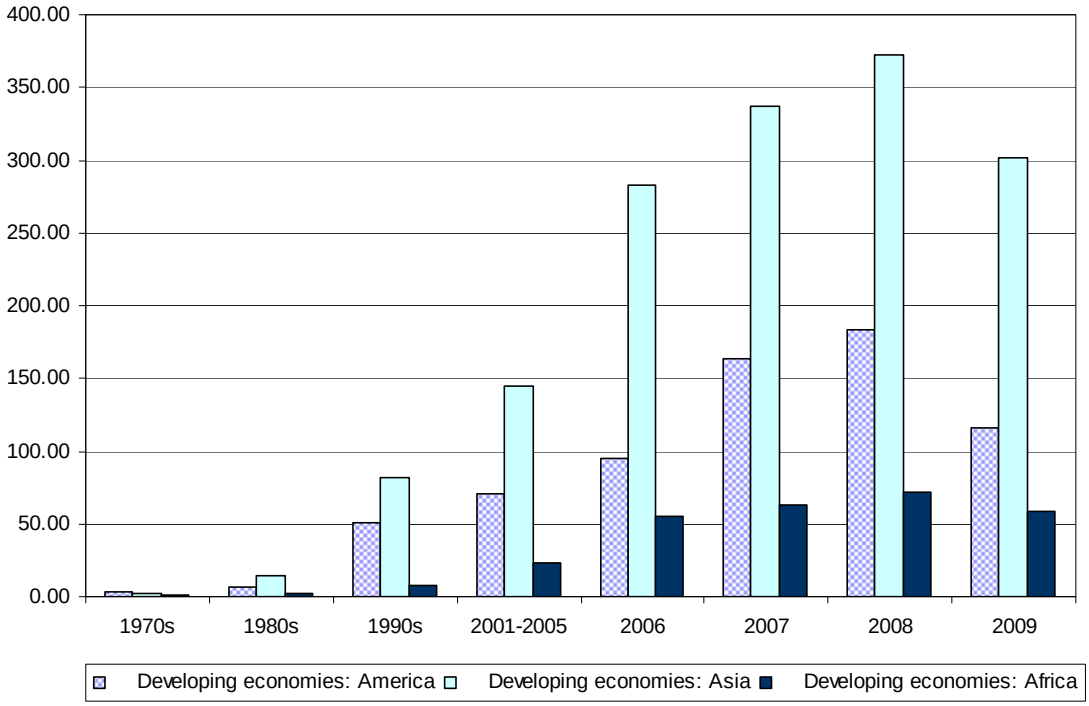
Because of its potential role in accelerating growth and economic transformation, many developing countries in general, seek foreign investment to complement their resources to finance development. In Africa, FDI is believed to provide the much needed funds to bridge the gap between savings and investment since the region's generally low income limits its ability to raise resources domestically to finance development (see for example Ajayi 2007). FDI is envisioned in the New Partnership for Africa's Development (NEPAD) declaration and perceived to be a key resource for the translation of NEPAD's vision of growth and development into reality.

Unfortunately, the distribution of FDI inflows among the developing regions has been uneven. The African continent's share of the global FDI remains small and the lowest, despite yielding the highest rate of return among developing host regions (UNCTAD 2010).

In 2009, FDI in Africa was only about five percent of the 43 percent share of the developing world in the global inflows. The developing countries in Asia had 27 percent while the developing countries in Latin America had 11 percent, more than double that of Africa's share. Africa's FDI inflows was USD 58 billion in 2009, while the developing Asian and American countries' shares were USD 301 billion and USD 117 billion, respectively (Figure 1 & Appendix 1).

The reality, however, is that the developed countries are still the most preferred destination of FDI with over 50 percent share of the world's inflows, amounting to USD 566 billion in 2009. The trends of FDI inflows in these countries, however, have been declining as the share of the developing economies, particularly Asia, has generally been increasing but interrupted by the 2008-2009 economic and financial crises. The former's share of the FDI inflows has declined from over 76 percent in the 1970s to around 51 percent recently while the latter's share has increased from about 24 percent in the 1970s to 43 percent in 2009. Sadly, the African continent has not been able to take advantage of this structural shift as its FDI share of the global inflows has only increased slightly from four percent in the 1970s to five percent in 2009.

Figure 1. Trends in FDI Inflows in Developing Countries in Africa, Asia, and Latin America



Source: *UNCTADStat online database.*

Notwithstanding the smallness of these inflows, they are crucial to the African countries' pool of resources, contributing to the much needed capital to support development. FDI inflows in more than half of the 53 countries in Africa contribute at least a fifth to their gross domestic capital formation or total investments, and at least more than half in such countries as Angola, Libya and Nigeria (see Appendix 1).

Main Destination of inflows of FDI into Africa

Incidentally, not only the fact that FDI inflows in Africa are the lowest in the world, but also the fact that inflows are concentrated in a few countries mostly with natural resource endowment[2]. In fact, over 60 percent of these resources go to the top five African countries recipient of FDI namely: Angola, Egypt, South Africa, Nigeria and Libya based on the three-year average FDI figures of 2007-2009 (Table 1). Except for South Africa, the other four countries are the largest oil producers in the continent. Completing the list of the top ten main country destinations of FDI in Africa are Sudan, Algeria, Congo, Morocco and Tunisia. Altogether, the ten African countries received 79 percent of the total FDI inflows in the region. Furthermore, the top 20 main destinations of FDI flows in the continent account for a total of 92 percent of the FDI inflows in the region. The remaining eight percent of the total FDI is shared among the rest of the 33 African countries.

It is interesting to note that the top ten major destinations of the FDI inflows in Africa belong to the middle income countries—mostly lower middle income (Table 2). In the economic literature, Mottaleb and Kalirajan (2010) found that the lower middle-income, among the developing countries, are the preferred destination of FDI. Their explanation is that these countries have large domestic markets and are highly linked with the global market through international trade and offer a more business-friendly environment to investors. While this might be applicable to the developing Asian countries, it may not be entirely true for the middle income countries in Africa.

Aside from Egypt, South Africa and Nigeria, the other countries that are main destination of FDI in Africa have relatively small populations. Moreover, most of these countries are among the bottom from the ranking of countries on the basis of the friendliness of business regulations, in particular the ease of doing business index (World Bank, 2010a). However, most of their rankings are better than the average country in Africa (section 4). In contrast with the developing Asian countries, where most of the FDI are largely market-seeking and efficiency-seeking investments directed towards vertically integrated high-tech industries (Athukorala 2009), the African FDI are mostly resource-seeking investment. This gave the oil producing countries in the region a huge advantage over the other African countries that have limited natural resources.

FDI and Exports Nexus

From the foregoing discussion, it is now well established that the FDI inflows in Africa are dominated by the mining industry[3]. Majority of the preferred FDI country destinations in the

[2] However, a recent significant development indicates that the manufacturing sector in Africa seems to be catching up as 41 percent of the Greenfield's FDI goes to this sector (UNCTAD 2010).
[3] Sector breakdown of FDI data are not available.

continent are oil producers and hence, most of the FDI inflows are extensively directed towards the hydrocarbon industry (see Table 2). Nonetheless, in South Africa, Egypt, Morocco and Tunisia, the FDI inflows are more diversified into sectors such as tourism, banking services, telecommunications, and manufacturing.

Table 1. Top 20 Destination of FDI in Africa

Rank	Countries	Average FDI: 2007-2009 (In Million USD)	Share in Africa's FDI (%)	Cumulative Share (%)
1	Angola	13,159.13	20.4	20.4
2	Egypt	9,261.43	14.3	34.7
3	South Africa	6,799.10	10.5	45.2
4	Nigeria	6,250.62	9.7	54.9
5	Libya	3,824.67	5.9	60.8
6	Sudan	2,690.32	4.2	65.0
7	Algeria	2,384.70	3.7	68.7
8	Congo	2,280.69	3.5	72.2
9	Morocco	2,207.39	3.4	75.6
10	Tunisia	2,020.69	3.1	78.7
11	D R Congo	1,495.40	2.3	81.1
12	Ghana	1,253.51	1.9	83.0
13	Zambia	1,073.98	1.7	84.7
14	Madagascar	833.30	1.3	86.0
15	Uganda	773.06	1.2	87.1
16	Equatorial Guinea	695.03	1.1	88.2
17	Tanzania	657.10	1.0	89.2
18	Namibia	656.56	1.0	90.3
19	Mozambique	633.40	1.0	91.2
20	Niger	477.94	0.7	92.0

Source: Compiled from *UNCTADstat online database.*

Given the prevailing pattern of FDI inflows, by extension most of the exports in the top country destinations of FDI are also controlled by the petroleum industry. For example, Angola's exports of petroleum and petroleum products account for almost 97 percent of its total exports. This followed by Nigeria and Libya, where exports from the same products are about 85 percent of their total exports. Sudan, Congo and Algeria exports of these products are also relatively high with 79 percent, 67 percent and 47 percent, respectively of their total exports.

Table 2. Level of Income, Sectoral FDI Distribution and Exports in Selected African Countries

Countries	Income Classification[1]	Main FDI	Main exports	Percent of manufacturing in exports	Percent of petroleum and petroleum products in exports
	1	2	3	4	5
1. Angola	Lower Middle Income	Mining & quarrying (oil sector)	Petroleum and petroleum products	..	96.7
2. Egypt	Lower Middle Income	Tourism, banking, telecommunication, & manufacturing	Manufactured goods (Iron & steel); Petroleum & petroleum products; natural gas	19.00	18.0
3. South Africa	Upper Middle Income	Telecommunications and IT; Mining & quarrying; motor & components	Manufactured goods (non-ferrous metals, iron & steel; Ores, metals & precious stones; Machinery & transport equipment	51.00	2.1
4. Nigeria	Lower Middle Income	Mining & quarrying; Manufacturing	Petroleum and petroleum products	1.00	85.4
5. Libya	Upper Middle Income	Mining & quarrying (Hydrocarbon sector)	Petroleum and petroleum products; natural gas	..	85.0
6. Sudan	Lower Middle Income	Mining & quarrying; Infrastructure	Petroleum and petroleum products	..	78.8

7. Algeria	Upper Middle Income	Mining & quarrying (Hydrocarbon sector)	Petroleum and petroleum products; natural gas	1.00	47.1
8. Congo, Rep	Lower Middle Income	Mining & quarrying; Telecommunication sector	Petroleum, petroleum products, & related materials	..	67.0
9. Morocco	Lower Middle Income	Tourism, banking, telecommunication, & manufacturing	Manufactured goods(articles of apparel and clothing accessories); Textile fibers, yarn, fabrics and clothing, basic food items; machinery & transport equipments	65.00	2.0
10. Tunisia	Lower Middle Income	Tourism, banking, telecommunication, & manufacturing	Manufactured goods (articles of apparel & clothing accessories; Machinery & transport equipment; Textile fibers, yarn, fabrics and clothing	70.00	13.6

Notes:

[1] World Bank Country Classification, January 2011

Sources: UNCTADStat online database; WDI online database; Nurudeen et al. (2010); Credit Agricole Egypt: http://www.egypt-import-export.com/en/country-profiles/angola/investing-3; AERC (2007); Column 4 were from World Development Report (2010b); Columns 3 & 5 were derived from *UNCTADstat Online*, 2009 figures

On the contrary, some countries such as Tunisia, South Africa and Egypt have been successful in diversifying their exports base, minimizing reliance on oil exports. Tunisia's share of the manufacturing exports to its total exports is enormous—amounting to 70 percent. On the other hand, South Africa was able to increase its manufacturing share of total exports to a substantial level of over 50 percent. Egypt, however, has only managed to raise its manufacturing exports to about 19 percent of it total exports but still higher than the exports share of petroleum and petroleum products to the total exports. This means that the country derives most its export revenues from other sectors such as tourism, banking and telecommunication.

3. Investment Climate and FDI

A growing number of studies in the economic literature have been focusing on the role of the investment climate, defined to cover both foreign investment regime and general investment environment, as an important factor in attracting FDI inflows to the developing countries. Many argued that the profit-related incentives to investors (e.g. tax concession) do not generally work unless they are appropriately combined with other incentives to improve the general investment climate. In other words, specific incentives are relevant for an investment decision only if the general business environment is conducive for making profit. Athukorala (2009) added that when competing for FDI, governments usually offer a good incentive package to attract multinational enterprises (MNEs) to locate their affiliates in their countries. However, these are generally counter-balanced by similar moves by other competing countries. Therefore, investment incentives may matter only when other conditions are roughly similar among the alternative host countries.

Many studies have given empirical evidences that a favourable business environment can help increase the developing countries chance of obtaining FDI inflows (see for example, Dollar et al 2006; Kinda 2009; Mottaleb & Kalirajan 2010, Sekkat & Veganzones-Varoudakis 2007). However, no single set of indicators was used by the various studies to describe investment climate. Sekkat et al. (2007) considered infrastructure availability, sound economic and political conditions as being among the factors that make up investment climate. In addition to the availability of infrastructure, Kinda (2009) included financial development and good institutions to constitute a promising business environment (see also Tran 2008; and Dollar et al 2006). On the other hand, Mottaleb and Kalirajan (2010) investigate the effect of business environment on FDI focusing on the rules and regulations relating to investment and business, and macroeconomic stability. Although the various studies used broad indicators to describe investment climate; the general consensus is that investment climate constraints negatively influence the inflows of FDI.

Kinda (2009) showed that investment climate constraints such as under-developed physical infrastructure and financial market hamper FDI in developing countries. These results were based on the econometric analysis of firm-level data across 77 developing countries. According to the study, a well developed infrastructure is essential to attract foreign capital. In particular, if the FDI is in the manufacturing sector, a good provision of infrastructure reduces transaction costs by allowing entrepreneurs to connect easily with their suppliers and customers. This observation also applies to well developed financial services where it can

facilitate financial transactions between foreign firms and their customers and employees in the host country. Kinda also found that finance is ranked as the most important investment climate constraint for firms (both local and foreign), and foreign firms locate more where financing constraints are lower. In terms of specificity to the region, the study showed that the effects of these investment constraints to Sub-Saharan African countries were not significantly different from the other developing countries.

In another study, Sekkat & Veganzones-Varoudakis (2007) investigate the importance of infrastructure availability, and sound economic and political conditions in increasing developing countries' attractiveness with respect to FDI. The various indicators were assessed together with other controlled variables, in particular trade openness, in order to analyze their complementarity. Sound economic conditions was measured using the economic risk rating indicator, which provides an assessment of a country's current economic strengths and weaknesses while political risk rating is to provide a means of assessing the political and institutional framework of the countries. Availability of infrastructure was represented by the availability of phones. Using a panel of 72 developing countries, the study showed the importance of both trade openness and the aspects of investment climate in attracting FDI. According to the study, improvement in business climate may, in fact, result in an increase of FDI inflows that is even more important than that resulting from a greater openness. Furthermore, the study demonstrated that Africa and South Asia would have benefited more than others from an increased openness and an improved investment climate, where FDI flows could have been twice as important if these regions had had the same degree of openness and investment climate as East Asia.

Finally, Mottaleb & Kalirajan (2010) analyze the impact of the rules and regulations relating to investment and business among the other controlled variables that generally reduce cost of doing business. Accordingly, a business-friendly environment with appropriate rules and regulations could significantly reduce operations and hidden costs and allow the market to function well. Thus, this favourable business environment may likely to attract profit-seeking investors. Mottaleb & Kalirajan further argued that socio-economic and political variables such as regulatory frameworks, bureaucratic hurdles and red tape, regulations relating to setting up a new business, judicial transparency and the extent of corruption in the host country may influence the inflow of FDI affecting the efficiency, productivity and cost structure.

Mottaleb & Kalirajan used a sample of 68 developing countries taking from both low-income and lower-middle income countries to analyze the determinants of FDI in developing countries. To capture the effects of the host's economy's business environment, regulatory framework and macroeconomic stability on FDI inflows, the number of days required to start a business, time required to prepare and pay taxes, and the rate of inflation were considered possible influential variables. Inflation rate signals the health status of the host economy. These indicators of investment climate as well as infrastructure and other controlled or traditional variables were used in regression analysis separately for low-income countries, lower-middle income countries, Asian countries, and African and Latin American countries. The study found that in general, lower-middle income countries and Asian countries are highly successful in attracting FDI compared to low-income, African and Latin American countries. The analysis showed that most lower-middle income countries and Asian countries, besides their large domestic markets, are highly linked with the global market through international

trade and offer a more business-friendly environment to investors. Moreover, a business-friendly environment measured by the days required to start a business is one of the most important and significant factors in determining the FDI inflows to developing countries.

4. **Business Environment, Reforms and Ease of doing Business in Africa**

As argued in the previous section, a friendly business environment promotes country's competitiveness to attract FDI. This important factor has also been recognized by many African economists and policymakers. For example, Uganda has been one of the main destinations of FDI in Africa in recent years (Table 2) and this is partly due to its predictable investment climate. Obwona & Egesa (2007) found that some of the most important factors identified relating to friendly business environment, which contributed significantly to FDI attractions to Uganda are: (1) a predictable and consistent policy and macroeconomic environment; (2) reforms undertaken among incentive schemes and related government agencies to fulfil the criteria for investment promotion; and (3) administrative simplicity. In contrast with this experience, Mwega & Ngugi (2007) observed that the deterioration of business environment in Kenya in the 1980s and 1990s was the major deterrent to its attraction of FDI inflows. Moreover, in Cameroon, while infrastructure development is the major determinant of FDI, Khan and Bamou (2007) argued that the country needs to create a more investment-friendly environment to raise its competitiveness in attracting FDI.

While many countries may find it costly to institute reforms and improve its business environment and governance, the benefits from FDI inflows surely outweighs the costs creating a friendly business environment. As shown previously, FDI plays a crucial role as providers of technology, management expertise, finance and linkage with the world market. Furthermore, it increases job opportunities and employment to the people of the host countries. And most importantly, FDI may lead to the structural transformation and rapid economic growth of the developing host countries (Caves 1982; Helleiner 1989; Ozawa 1992; and Haddad and Harrison 1993)[4]. A classic example of this is the experience of Japan and recently, the experiences of the Newly Industrializing countries (NICs) of Asia and Latin America. By adopting the model of "learning and emulation", these countries are now also providers of FDI, especially in manufacturing and more active in other developing countries than in the advanced countries (Ozawa 1992; UNCTAD 1999 & 2010).

In view of this, African countries have made considerable efforts to improve their investment climate through a number of economic reforms and improving regulatory frameworks (UNCTAD 1999; Ajayi 2007; Nnadozie et al. 2007). These include fiscal incentives such as for example, reduction of corporate tax and royalties, tax exemptions and tax holidays; privatizing state-owned enterprises; efforts to stabilize and maintain sound macroeconomic environment and governance reforms. Progress has also been made in other areas that are important for the FDI climate, such as trade liberalization, the strengthening of the rule of law, and improvements in legal and other institutions as well as in telecommunications and transport infrastructure.

[4] The three main channels in which FDI may lead to economic growth are through (1) augmenting domestic savings in the process of capital accumulation; (2) technology transfer that increases factor productivity and efficient use of resources; and (3) increasing exports (Ajayi 2007).

Finally, to improve good governance and political reforms, the African Heads of States established the African Peer Review Mechanism (APRM) in March 2003—a regional process under NEPAD. It is designed to promote good governance and institutional change, increase growth and generate sustainable socioeconomic development and greater regional integration on the continent. The mechanism is voluntary and self-monitoring. It targets institutional strengthening by improving the quality of political, economic and corporate governance in African countries and thereby promoting socioeconomic development. The five-stage process includes periodic reviews and benchmarking of the policies and practices of participating states. The review ascertains progress made towards achieving mutually agreed goals, as well as compliance with adopted political, economic and corporate governance values, codes and standards. The APRM's five stages include self-evaluation, external review, report preparation, peer review and dissemination of findings (Nnadozie et al. 2007).

Despite considerable reforms, however and as it has been observed, Africa has not yet attracted significant amount of global FDI compared to other regions of the world. The traditional explanations given include the perceived risks of investment and poor image of Africa, price and exchange rate instability, and the relative mediocre nature of reforms in Africa compared to other regions (Ajayi 2007; Nnadozie et al. 2007). Could it be that African countries need to institute more reforms in the way they manage business rules and regulations? The next section looks closely at how Africa countries have performed in reforming the business climate, particularly in relation to its business regulations governing the life cycle of business and investments and how this has influenced doing business in the continent.

The Ease of Doing Business in Africa

A fundamental premise of "doing business" is that, economic activity requires good rules and regulations (World Bank 2010a). These include rules that establish and clarify property rights and reduce the costs of resolving disputes, rules that increase the predictability of economic interactions and rules that provide contractual partners with core protections against abuse. Thus, doing business requires regulations that are designed to be efficient, to be accessible to all who need to use them, and to be simple in their implementation. The World Bank Report (2010a) noted that more governments are committed to the economic health of their countries and creating opportunities for their citizens and are now focusing on more than macroeconomic conditions. They are also paying attention to the laws, regulations and institutional arrangements that shape daily economic activity. In 2003, the World Bank started a project of ranking countries according to the "ease of doing business" as potential host for FDI. The ease of doing business (EDB) index provides a quantitative measure of regulations affecting the following ten stages of the life of a business (World Bank 2010a)[5]:

- *Starting a business*
  Procedures, time, cost and paid-in minimum capital to open a new business
- *Dealing with construction permits*

[5] Data in "doing business" are usually taken the previous year prior to its publication. The indicators are used to identify economic outcomes and identify what reforms have worked, where and why.

Procedures, time and cost to obtain construction permits, inspections and utility connections

- *Employing workers*

  Difficulty of hiring index, rigidity of hours index, difficulty of redundancy index, redundancy cost

- *Registering property*
  Procedures, time and cost to transfer commercial real estate
- *Getting credit*
  Strength of legal rights index, depth of credit info index
- *Protecting investors*
  Strength of investor protection index: extent of disclosure index, extent of director liability index and ease of share holder suits index
- *Paying taxes*
  Number of tax payments, time to prepare and file tax returns and to pay taxes, total taxes as a share of profit before all taxes borne
- *Trading across borders*
  Documents, time and cost to export and import
- *Enforcing contracts*
  Procedures, time and cost to resolve a commercial dispute
- *Closing a business*
  Recovery rate in bankruptcy

Table 3 presents the summary of the ranking of regions from the 2010 World Bank survey of "ease of doing business." The numerical value of the ranking or index indicates that the lower its value the more the ease of doing business in a particular country. In 2010 survey, there were 183 countries included. Overall, Africa had an average score of 139 points, the lowest rank among the various regions of the world. Asia and the Pacific, and the Latin American countries had average scores of 83 points and 95 points, respectively. The OECD countries again proved to be the favourite destination of FDI where doing business is much easier compared to the developing and lower income countries.

Looking closely at the ranking from the ease of doing business survey for the countries that are main destinations of FDI in Africa, it is noted that most of them had ranks better than 139, the regional average (Table 4). Only 6 out of 20 countries namely: Democratic Republic of Congo, Republic of Congo, Niger, Equatorial Guinea, Angola and Sudan ranked among the bottom, lower than the African average. However, South Africa, Namibia, Tunisia, Zambia and Ghana made it to the top 100 countries in terms of providing a favourable business environment[6].

[6] In fact, South Africa is among the top 50 countries, which was ranked in the 34th position (World Bank 2010a). The other African countries that are among the top 100 are Botswana (39), Rwanda (67), and Kenya (95).

Table 3. Ranking of Business Friendly Regulations

Region	Average Ranking
OECD, High Income	30
East Asia & Pacific	83
Middle East & N Africa	92
Latin America & Caribbean	95
South Asia	118
Sub-Saharan Africa	139

Source: *World Bank (2010a).*

This may imply that most of the African countries that are preferred destinations of FDI provide better business rules and regulations, making business easier than many African countries that are less favoured. This is being exhibited in many stages of the business life cycle in Africa (Table 4). For example, it will take fewer days to start a business in South Africa (22 days), Tunisia (11 days), Zambia (18 days) and Egypt (7 days) with less number of procedures than say, in Eritrea, Chad and Guinea-Bissau, ranked 181, 182 and 183, respectively in the 2010 EBD index. In these countries starting a business will take at least 175 to more than 200 days to start a business (see World Bank 2010a). DR Congo, Rep Congo, Niger, Eq Guinea, and Angola, however, are still below the ranking for Sub-Saharan Africa with average index of 127 for starting a business. The above general observations are also noted in the business property registration where process takes fewer days than the average for Africa.

The other business aspects where most of the 20 countries listed on Table 4 have comparative advantages are access to credit, paying taxes, border trade, contract enforcement and closing a business. Most of these countries provide better access to credit where South Africa, Namibia and Zambia are among the leaders. These countries also charged relatively lower tax as percent of investors' profit; and provide relatively strong legal environment in enforcing contract. In most of these countries, trading across borders is cheaper considering both export and import costs than most African countries. And finally, when closing a business, South Africa, Algeria, Morocco, Tunisia, Zambia, Uganda and Namibia will provide a recovery rate of more than 30 cents per dollar investment and with relatively fewer years to conclude operations, compared with the average recovery rate of 17 cents for SSA.

In terms of dealing with licenses, however, many of the African countries under consideration would still need to improve. Licenses take at least five months before their issuance, except for Tunisia (two and a half months). In some countries such as Angola, Nigeria, DR Congo,

and Tanzania, it will take almost a year before a license may be issued. In Mozambique, it will take more than a year to deal with a license. The average for the SSA, however, is 246 days or about 8 months.

The central question of whether friendly business rules and regulations which improve investment climate will help attract more FDI in Africa is the subject of empirical investigation in this study.

Table 4. The Ease of Doing Business Index in top 20 African countries main FDI destinations

Africa's FDI Main Destinations	EDB Index 2009	Starting Business (No. Procedures /Days) (1)	Dealing with Licenses (No. of Procedures /Days) (2)	Employing Workers (Rigidity of Employment Index, 0-100) (3)	Registering Properties (No. of Procedures /Days) (4)	Getting Credit (Strength of Legal Rights Index, 0-10) (5)
1. Angola	169	165 (8/68)	123 (12/328)	178 (66)	173 (7/184)	87 (4)
2. Egypt	106	24 (6/7)	156 (25/218)	120 (27)	87 (7/72)	71 (3)
3. South Africa	34	67 (6/22)	52 (17/174)	102 (35)	90 (6/24)	2 (2)
4. Nigeria	125	108 (8/31)	162 (18/350)	37 (7)	178 (13/82)	87 (8)
5. Libya	..	..	..	..	..	..
6. Sudan	154	118 (10/36)	139 (19/271)	153 (36)	37 (6/9)	135 (5)
7. Algeria	136	148 (14/24)	110 (22/240)	122 (41)	160 (11/47)	135 (3)
8. Congo	179	166 (10/37)	69 (14/169)	169 (63)	169 (7/116)	135 (3)
9. Morocco	128	76 (6/12)	99 (19/163)	176 (60)	123 (8/47)	87 (3)
10. Tunisia	69	47 (10/11)	107 (20/84)	108 (40)	59 (4/39)	87 (3)
11. D R Congo	182	154 (13/149)	146 (14/322)	174 (63)	157 (8/57)	167 (3)
12. Ghana	92	135 (8/33)	153 (18/220)	133 (27)	33 (5/34)	113 (7)
13. Zambia	90	94 (6/18)	151 (17/254)	116 (21)	94 (6/39)	30 (9)
14. Madagascar	134	12 (2/7)	108 (16/178)	152 (56)	152 (7/74)	167 (2)
15. Uganda	112	129 (18/25)	84 (16/143)	7 (0)	149 (13/77)	113 (7)
16. Eq Guinea	170	178 (20/136)	90 (18/201)	182 (66)	76 (6/23)	135 (3)
17. Tanzania	131	120 (12/29)	178 (22/328)	131 (54)	145 (9/73)	87 (8)
18. Namibia	66	123 (10/66)	38 (12/139)	43 (13)	134 (9/23)	15 (8)
19. Mozambique	135	96 (10/26)	159 (17/381)	156 (40)	151 (8/42)	127 (2)
20. Niger	174	157 (9/17)	166 (17/265)	173 (68)	85 (4/35)	150 (3)
SS AFRICA	139	127(9/47)	118(18/246)	119(-)	121(7/72)	121(5)

Notes: (1) ".." means no data; (2) The first figure in each column 1 - 10 refers to rank while the numbers in the parentheses denote the specific but selected measures describe in each column.

Source: Compiled from World Bank (2010a).

Table 4. The Ease of Doing Business Index in top 20 African countries main FDI destinations (continued…)

Africa's FDI Main Destinations	Protecting Investors (Strength of Investors Protection Index, 0-10) (6)	Paying Taxes (Total tax rate, % of Profit) (7)	Trading Across Borders (Export/ Import Cost, USD per Container) (8)	Enforcing Contracts (Cost, % of Claims) (9)	Closing A Business (Years/ Recovery Rate, cents per $) (10)
1. Angola	57 (5.7)	139 (53.2)	171 (2250/3240)	181 (44.4)	144 (6.2/10)
2. Egypt	73 (5.3)	140 (43.0)	29 (737/823)	148 (26.2)	132 (4.2/16.8)
3. South Africa	10 (8.0)	23 (30.2)	148 (1531/1807)	85 (33.2)	76 (2/32.2)
4. Nigeria	57 (5.7)	132 (32.2)	146 (1263/1440)	94 (32.0)	94 (2/28.0)
5. Libya	..	..	..	..	..
6. Sudan	154 (3.3)	94 (36.1)	142 (2050/2900)	146 (19.8)	183 (no practice/0)
7. Algeria	73 (5.3)	168 (72.0)	122 (1248/1428)	123 (21.9)	51 (2.5/41.7)
8. Congo	154 (3.3)	180 (65.5)	178 (2490/2959)	159 (53.2)	120 (3/20.4)
9. Morocco	165 (3.0)	125 (41.7)	72 (700/1000)	108 (25.2)	67 (1.8/35.1)
10. Tunisia	73 (5.3)	118 (62.8)	40 (783/858)	77 (21.8)	34 (1.3/52.3)
11. D R Congo	154 (3.3)	157 (..)	165 (2607/2483)	172 (151.8)	152 (5.2/5.4)
12. Ghana	41 (6.0)	79 (32.7)	83 (1013/1203)	47 (23.0)	106 (1.9/24.0)
13. Zambia	73 (5.3)	36 (16.1)	157 (2664/3335)	87 (38.7)	83 (2.7/30.2)
14. Madagascar	57 (5.7)	74 (39.2)	111 (1279/1660)	64 (33.1)	115 (2.9/20.9)
15. Uganda	132 (4)	66 (35.7)	145 (3190/3390)	116 (44.9)	53 (2.2/41.1)
16. Eq Guinea	147 (3.7)	163 (59.5)	138 (1411/1411)	72 (18.5)	183 (no practice/0)
17. Tanzania	93 (5.0)	119 (45.2)	108 (1262/1475)	31 (14.3)	113 (3/21.3)
18. Namibia	73 (5.3)	97 (9.6)	151 (1686/1813)	41 (35.8)	55 (1.5/39.5)
19. Mozambique	41 (6.0)	97 (34.3)	136 (1100/1475)	129 (142.5)	136 (5.0/15.2)
20. Niger	154 (3.3)	141 (46.5)	173 (3545/3545)	138 (59.6)	141 (5/14.0)
SS AFRICA	113(4)	115(71)	136(1916/2341)	118(49)	128(3/17)

Notes: (1) ".." means no data; (2) The first figure in each column 1 - 10 refers to rank while the numbers in the parentheses denote the specific but selected measures describe in each column.

Source: Compiled from *World Bank* (2010a).

5. Empirical Model, Data and Results

The Theoretical Framework

It is commonly assumed that the multinational corporations (MNCs) will come to the host country on the premise that they would take advantage of the cheaper factor of production that is abundant and thus can exploit and profit from any differentials in prices and availability of commodities between different locations. The differentials are being determined by productivity and factor endowment (Ozawa 1992). However, aside from the divergent cost of labour, there are other set of characteristics that a host country must possess in order to attract the inflows of FDI. The economic literature suggests various factors that might draw the inflows of FDI into a host country. These range from comparative labour costs, level of skills and expertise (i.e. human capital), country size, economic openness, natural resources endowment, returns to investment, macroeconomic and political factors, and investment climate[7].

As suggested in Mottaleb & Kalirajan, however, the basic theoretical discussion on the determinants of FDI might start by posing a question as to why foreign investors invest in other countries. As a rational economic agent, a firm's main objective is to maximize profit. Therefore, the fundamental reason why foreign investors invest in another country is motivated by profit or the return on investments (Kinda 2009; Mottaleb & Kalirajan 2010). As in Mottaleb & Kalirajan, the profit function may provide a theoretical framework that identifies the factors that determine FDI. This theoretical framework will then be adopted in the subsequent discussions.

A standard economic textbook defines profit (Π) as the difference between total revenue (R) and total cost (C). Given that total revenue is a product between quantity of goods (Q) and its corresponding price (P), Π may be expressed as:

$$\Pi = \Pi(P, Q, C) \qquad (1)$$

where $\partial\Pi / \partial P > 0$, $\partial\Pi / \partial Q > 0$, and $\partial\Pi / \partial C < 0$.

Moreover, total cost is a combination of the input costs (IN), operation costs (OP) and some hidden costs (HD). Input costs is the cost of the factor of production such as land, labour and energy costs; operation costs includes both financial and time costs as well as transaction costs; while hidden cost involves the time and money costs declared by the government, for example the monetary cost to apply for a license to start a business as well as the waiting time to actually start it.

[7] See, among others, Borensztein et al. (1995), Asiedu (2002, 2006), Baliamoune-Lutz (2004), Nnadozie and Okonkwo Osili (2005), Ndikumana and Verick (2007), Sekkat et al. (2007) and Kinda (2009).

Accordingly, profits are maximized in a country where foreign investors can operate their businesses at a low cost and produce at full scale with competitive prices. Therefore, it follows that variables which determine profit also determine the inflows of FDI to a country. Substituting input costs, operation costs, and hidden costs in place of total costs, the equivalent expression for FDI is given as:

$$FDI = f(P, Q, IN, OP, HD). \quad (2)$$

According to equation (2) foreign investors prefer to invest in countries where they can produce large amounts of goods at lower costs. Using the same argument, some hypotheses may be derived from the same equation. Firstly, the size of an economy and its growth rate might critically affect FDI inflows to a country. Large and fast-growing economies offer economies of scale and also offer low transportation and product marketing costs, as products will mostly be sold in the host economy in the case of market-seeking investments.

Secondly, for foreign investors that export a portion of their product to other countries, a country with a small domestic market, but well linked and opens to the global market through international trade, can also provide economies of scale similar to countries with large domestic market. Thus, openness to global markets might significantly determine the inflow of FDI besides the size of GDP and its growth rate.

Moreover, besides cheap labour and physical infrastructure, business environment and rules and regulations relating to investment also affect the cost of doing business in a country by affecting the operation of a business. A business-friendly environment with appropriate rules and regulations could significantly reduce operations and hidden costs and allow the market to function well. Thus, profit-seeking foreign investors might prefer to invest in countries where there is a business-friendly environment and the rules and regulations relating to investment and business are favourable.

Furthermore, socio-economic and socio-political variables, such as regulatory frameworks, bureaucratic hurdles and red tape, regulations relating to setting up a new business, judicial transparency and the extent of corruption in the host country, therefore might significantly affect the inflow of FDI by affecting the efficiency, productivity and cost structure.

The Empirical Model

Based on the foregoing discussions, the costs of doing business are largely related to the country's business environment or investment climate, which among others, considers the country's economy, trade openness, infrastructure, business rules and regulations, and governance. Therefore, minimizing the total cost of doing business or maximizing profit for FDI looks for favourable investment climate or a friendly business environment.

To test these hypotheses, the empirical model in the study is specified as follows:

$$FDI = f(X_j, Y_k, W_p, Z_q) \quad (3)$$

where:

X_j = refers to the economic variables, 1 … J, such as exchange rate, inflation and other macroeconomic factors.

Y_k = refers to policy variables, 1 … K, such as trade openness, and business rules and regulations.

W_p = refers to governance or political risk variables, 1 … P, such as wars, conflict, corruption, etc.

Z_q = refers to other variables, 1 … Q, such as labour cost, human capital, market size and natural resource endowment.

The above equation may be expressed in an econometric relationship as:

$$FDI_t = \mu + \alpha' x_t + \beta' y_t + \lambda' w_t + \gamma' z_t + \varepsilon_t \quad (4)$$

where:

μ is a constant; $\alpha', \beta', \lambda'$ and γ' are vectors of parameters to be estimated; FDI_t is the value of foreign direct investment at time *t*; which depends on explanatory variables $(x_{1t}, x_{2t}, ..., x_{Jt}) = x_t'$, $(y_{1t}, y_{2t}, ..., y_{Kt}) = y_t'$, $(w_{1t}, w_{2t}, ..., w_{Pt}) = w_t'$, and $(z_{1t}, z_{2t}, ..., z_{Qt}) = z_t'$ as defined above; and ε_t is the stochastic error term.

The Data and Estimation Method

This study used two sets of data for estimating the regression model in equation (4). The first set of data is using the country policy and institutional assessments (CPIA) of the World Bank data set[8]. The CPIA are used by the World Bank to assess the quality of a country's current policy and institutional framework. "Quality" refers to how conducive that framework is to fostering poverty reduction, sustainable growth, and the effective use of development assistance.

[8] World Development Indicators, Online database.

The CPIA data used for this study are the indices namely: macroeconomic ratings, transparency ratings, and business ratings to represent some of the explanatory variables in the model. Since, the CPIA ratings are composite indices, the macroeconomic ratings, which assesses the macroeconomic management of a particular country represent the health of the economy for the study; transparency ratings represents governance or political risk variable; and business ratings, which assesses the extent to which the legal, regulatory and policy environment helps or hinder private businesses, represent the policy variable. The ratings mean that the higher they are the better the business regulations, economic management, and public sector performance. A dummy variable is also included in the model estimation to control for the influence of the presence of natural resource endowment such as the mineral oil (oil dummy, which is equal to unity when a country is oil producer and zero otherwise); and the country size measured by GDP. The detailed definitions of the variables are provided in Appendix 2. The first regression included 38 African countries each with four years of observations covering the period from 2005 to 2008[9].

The second set of data used the ease of doing business index of the World Bank to represent the policy variable in terms of business rules and regulations. Ranking on the "Ease of Doing Business" are the average of the country rankings on the 10 stages of the life of a business (Section 4). A high ranking (meaning lower score) means that the regulatory environment is conducive to business operations and provides friendly business environment.

For the second sets of regression, to complete the picture of the investment climate, other variables were also included. To capture the health status of the host economy, inflation rate was used. Controlled and moderate inflation works as an indicator of the good health of the overall economy and vice versa. Population is another variable included to represent the market size. Openness is another policy variable included in the regression. Trade openness provides link to the rest of the world. For governance variable, again the transparency rating was used. Finally, the oil dummy was again included to control for the effect of the oil producing countries. The regression covered 43 countries each with two years observations, 2006 and 2007, for data consistency.

The dependent variable, FDI, is the net inflows in current US dollars. All regressions were estimated using fixed-effect panel data model, which is preferred over the random-effects model. Several diagnostic tests were performed during estimation and econometric issues such as heteroskedasticity problem were dealt with accordingly.

Estimation Results

The two sets of estimated regression results are presented in Tables 5 and 6, respectively. Using the CPIA data, the first regression results show that all the business rating, macroeconomic rating and the transparency rating are significant and have positive effects on FDI inflows. These results are consistent with the economic expectations that when there are better business regulations, sound macroeconomic management, and transparent public sector, an African country has a likelihood of attracting higher FDI, since all these factors reduce the cost of doing business and promote better business environment. In the same

[9] This is the number of African countries that have complete dataset.

regression, the oil dummy is also positive and highly significant, which supports the hypothesis that African countries with natural resource endowments obtained more FDI than less endowed African country. In the second regression, where GDP is added in the estimation, both the business rating variable and the oil dummy remain robust. The other notable result is that the GDP variable also has a significant positive effect on FDI. This seems to highlight an important observation that the middle income countries in Africa are more likely to be the destination of FDI. Almost 80 percent of FDI in Africa go to the ten middle income countries in the continent. In this regression, however, the estimated coefficient for macroeconomic rating took a different sign and the transparency rating is not statistically significant.

When using the second set of data, the estimated coefficients from the regressions showed more robust results. All variables included in the equations namely: ease of doing business, inflation, population, trade openness, oil dummy and transparency ratings have significant coefficients and taking correct signs. The ease of doing business variable representing business rules and regulations has significant effect on FDI[10]. In the earlier discussion, it was noted that there is a difference in the way business rules and regulations are done between most of the FDI-favoured African countries and the less favoured ones. This result lends evidence that the difference can be significant in promoting investments. Inflation, which represents the health status of the country's economy, has negative effect on FDI. This is not surprising since foreign investors look for price stability and low inflation when deciding to make investment in another country to reduce cost. Population has also a positive effect on FDI. This is especially true for the presence of the market-seeking FDI. Trade openness, which provides link to the rest of the world also, has positive but weak influence on FDI. A favourable investment climate needs good governance. This is shown by the significant and positive coefficient of the transparency rating representing public sector environment. Finally, the oil dummy is again significant and has positive effect on FDI. This again presents evidence that one of the main drivers of FDI in Africa is the presence of natural resources.

6. Conclusions and Policy Recommendations

This study investigates the relationship between investment climate and foreign direct investment in Africa with particular interest on whether friendly business environment promotes FDI. The study found that although one of the main motivations of FDI in Africa is the presence of natural resources, the business rules and regulations matters. This result is statistically significant when an empirical model was estimated using business rules and regulation variable as one of the explanatory variables among the other controlled variables. The two sets of sample data used to estimate the model both arrived at this important conclusion. It is noted that most of the FDI-favoured countries in Africa have much better business rules and regulations and thus provide a more friendly business environment to foreign investors than the average less FDI-favoured African country.

[10] The sign is negative since the higher the EDB index the more unfriendly the business rules and regulations in a country.

Table 5. Regression Results using CPIA Data

Variable	Regression 1: Coefficients	Regression 2: Coefficients
Constant	-463.09	-46.35
	(-9.01) ***	(-1.82) *
Business Rating	69.43	11.42
	(6.91) ***	(2.02) **
Macro Rating	76.81	-14.01
	(6.95) ***	(-3.06) ***
Transparency Rating	51.73	11.76
	(2.86) ***	(0.78)
Oil_production Dummy	653.21	231.41
	(13.53) ***	(4.08) ***
GDP	..	0.06
		(12.67) ***
Adjusted R^2	0.14	0.53
No of countries = 38 Total panel observations = 152		

Note: Figures in the parentheses are t-statistics. *** Significant at 1%; ** significant at 5%; significant at 10%.

Table 6. Panel data estimation with Ease of doing Business Index

Variable	Regression 1: Coefficients	Regression 2: Coefficients
Constant	275.02	-195.16
	(1.31)	(-0.49)
Ease of doing business	-2.71	-4.06
	(-2.45)**	(-2.71)***
Inflation	-33.78	-45.61
	(-4.69)***	(-3.78)***
Population	31.03	27.54
	(8.56)***	(6.36)***
Openness	1.39	3.50
	(1.68)*	(1.94)*
Oil_dummy	845.25	361.06
	(3.87)***	(1.58)*
Transparency ratings	..	207.33
		(2.74)***
Adjusted R^2	0.61	0.75
No of countries	35	25
Total panel observations	70	50

Note: Figures in the parentheses are t-statistics. *** Significant at 1%; ** significant at 5%; significant at 10%.

The study also reiterated the importance of the other variables characterizing a favourable investment climate such as the country's economy, trade policies, and public sector policy environment. The most notable result is that the size of a country's economy makes a significant difference in attracting FDI. Many middle income countries in Africa are favourite destination of FDI. Moreover, both open trade policy and transparent public sector may increase the inflows of FDI. These results counter the common perception that FDI is solely determined by the natural resource endowment. However, the bulk of FDI is still concentrated in those countries with oil and mineral resources.

This result therefore implies that the small and poor-resource countries in Africa may have a better chance of attracting FDI if they institute reforms to improve their business environment that will facilitate private businesses in investing, creating jobs, and becoming more profitable. This is encouraging given that many African countries have spent their scarce resources undertaking reforms of the business environment without any guarantee that this will lead to increased inflows of FDI.

As a policy recommendation, the African countries should continue to reform their business environment which will give better investment climate both for foreign and local investors. This means that the African governments should endeavour to embark on serious reforms that will focus on developing business rules and regulations that promote efficiency, high productivity and will reduce cost of doing business. Moreover, this would mean an efficient government bureaucratic system that would reduce the number of days and procedures in dealing with business registrations and licenses. This would also mean a better legal environment for investors' protection as well as the provision of several business incentives.

Moreover, in order to provide a good investment climate for businesses, the African governments should also continue to promote a predictable and consistent policy that will ensure a stable and sound macroeconomic environment. This should be accompanied by the policy of ensuring good governance and creation of strong political institutions.

For African countries that do not have abundant natural resources, a friendly business environment may provide opportunity to attract FDI on sectors such as manufacturing, telecommunications and services, which shares in FDI have been increasing in recent years. On the other hand, for those African countries that have abundant natural resources, a friendly business environment may provide opportunity to diversify FDI into the other sectors of the economy to reduce dependence on oil and mineral exports as some countries have already done. This could result in better adoption of technology, greater link to the world market, more employment and more resources for financing development and economic transformation in Africa.

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Appendix 1: FDI Inflows, 1971-2009

	1971-1980	1981-1990	1991-2000	2001-2005	2006	2007	2008	2009
(a) In Million USD								
World	28,042.30	108,243.55	521,371.83	747,465.14	1,459,133.28	2,099,972.91	1,770,872.84	1,114,189.32
Developed economies	21,756.16	84,888.10	376,048.13	487,679.39	970,098.14	1,444,074.78	1,018,272.54	565,891.99
Transition economies	23.60	13.28	5,094.45	20,441.71	54,669.27	90,968.23	122,587.77	69,948.29
Developing economies	6,283.78	23,342.18	140,229.25	239,344.05	434,365.87	564,929.90	630,012.53	478,349.04
Developing economies: America	3,300.16	6,827.46	50,840.48	71,208.72	94,557.08	163,612.24	183,195.01	116,554.61
Developing economies: Asia	1,871.04	13,854.90	81,687.98	144,584.58	283,112.82	336,922.39	372,738.95	301,366.54
Developing economies: Africa	1,037.60	2,446.20	7,291.24	23,283.86	55,382.41	63,091.81	72,178.78	58,564.61
East Africa	137.62	69.97	688.58	2,814.66	6,471.01	8,356.95	8,257.87	7,052.03
Dem. Rep. of the Congo	70.28	-16.28	11.96	255.43	256.10	1,808.00	1,726.80	951.40
Madagascar	2.99	6.68	24.70	86.17	294.22	777.48	1,179.78	542.63
Sudan	3.03	2.63	134.25	1,290.42	3,541.36	2,436.34	2,600.50	3,034.12
Tanzania	4.42	4.55	148.91	397.54	597.00	647.00	679.30	645.00
Uganda	0.67	-0.99	90.64	242.71	644.26	733.03	787.38	798.77
Central Africa	102.10	119.27	130.25	1,788.77	2,465.42	3,818.15	2,287.66	4,292.40
Congo	30.97	26.03	131.36	502.18	1,924.88	2,275.35	2,483.22	2,083.50
Equatorial Guinea	-0.02	2.52	103.46	612.79	469.51	1,242.73	-793.87	1,636.22
North Africa	152.54	998.83	2,194.89	5,654.32	19,714.92	22,486.58	21,835.57	15,212.89
Algeria	144.51	3.54	282.33	971.60	1,795.40	1,661.60	2,646.00	2,846.50
Egypt	225.97	878.22	854.66	1,785.44	10,042.80	11,578.10	9,494.60	6,711.60
Libya	-313.26	-125.27	-22.67	314.00	2,013.00	4,689.00	4,111.00	2,674.00
Morocco	18.06	72.79	583.06	1,630.33	2,450.30	2,803.48	2,487.20	1,331.50
Tunisia	77.69	163.29	488.82	662.61	3,307.91	1,616.10	2,758.37	1,687.59

	1971-1980	1981-1990	1991-2000	2001-2005	2006	2007	2008	2009
Southern Africa	184.51	295.75	2,201.16	9,232.50	10,501.14	18,764.27	28,741.65	21,622.73
Angola	6.49	96.35	695.36	4,672.91	9,063.67	9,795.81	16,581.02	13,100.57
Mozambique	1.60	2.70	105.25	258.38	153.73	427.36	591.60	881.23
Namibia	..	8.79	104.10	253.83	386.58	733.02	720.27	516.40
South Africa	57.83	7.35	946.89	3,306.34	-526.76	5,694.53	9,006.30	5,696.47
Zambia	35.49	65.75	131.05	288.60	615.80	1,323.90	938.60	959.43
West Africa	438.68	898.56	2,152.36	3,536.52	15,931.15	9,389.32	10,792.35	10,047.20
Côte d'Ivoire	49.92	44.55	221.51	249.11	318.86	426.78	482.13	408.95
Ghana	16.51	8.64	128.58	113.84	636.01	855.38	1,220.41	1,684.74
Guinea	0.16	6.76	19.45	63.48	125.00	385.90	381.88	140.85
Niger	18.74	9.63	6.69	17.48	50.54	129.04	565.87	738.90
Nigeria	225.23	608.13	1,524.78	2,518.87	13,956.49	6,086.73	6,814.40	5,850.73
(b) Share in World's Inflows								
World	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Developed economies	76.45	74.35	67.96	65.27	66.48	68.77	57.50	50.79
Transition economies	0.04	0.01	1.06	2.75	3.75	4.33	6.92	6.28
Developing economies	23.54	25.64	30.98	31.98	29.77	26.90	35.58	42.93
Developing economies: America	11.67	7.69	9.96	9.58	6.48	7.79	10.34	10.46
Developing economies: Asia	7.19	15.13	19.09	19.28	19.40	16.04	21.05	27.05
Developing economies: Africa	4.37	2.61	1.80	3.09	3.80	3.00	4.08	5.26
East Africa	0.94	0.31	9.16	17.56	15.40	13.25	10.76	0.58
Dem. Rep. of the Congo	0.24	-0.03	0.00	0.04	0.02	0.09	0.10	0.09
Madagascar	0.02	0.01	0.01	0.01	0.02	0.04	0.07	0.05
Sudan	0.01	0.01	0.02	0.17	0.24	0.12	0.15	0.27
Tanzania	0.49	0.25	9.07	17.23	15.00	12.88	10.33	..
Uganda	0.00	0.00	0.02	0.03	0.04	0.03	0.04	0.07

	1971-1980	1981-1990	1991-2000	2001-2005	2006	2007	2008	2009
Central Africa	0.49	0.28	0.03	0.29	0.19	0.19	0.14	0.42
Congo	0.15	0.04	0.03	0.06	0.13	0.11	0.14	0.19
Equatorial Guinea	0.00	0.00	0.02	0.08	0.03	0.06	-0.04	0.15
North Africa	0.61	1.06	0.58	0.73	1.35	1.07	1.23	1.37
Algeria	0.51	0.00	0.05	0.13	0.12	0.08	0.15	0.26
Egypt	0.55	0.98	0.23	0.21	0.69	0.55	0.54	0.60
Libya	-0.77	-0.23	0.00	0.04	0.14	0.22	0.23	0.24
Morocco	0.06	0.07	0.15	0.22	0.17	0.13	0.14	0.12
Tunisia	0.26	0.23	0.14	0.09	0.23	0.08	0.16	0.15
Southern Africa	0.86	0.37	0.48	1.22	0.72	0.89	1.62	1.94
Angola	0.02	0.15	0.15	0.64	0.62	0.47	0.94	1.18
Mozambique	0.01	0.00	0.02	0.04	0.01	0.02	0.03	0.08
Namibia	..	0.01	0.03	0.03	0.03	0.03	0.04	0.05
South Africa	0.45	0.05	0.20	0.40	-0.04	0.27	0.51	0.51
Zambia	0.13	0.05	0.04	0.04	0.04	0.06	0.05	0.09
West Africa	**1.93**	**0.84**	**0.62**	**0.47**	**1.09**	**0.45**	**0.61**	**0.90**
Côte d'Ivoire	0.17	0.05	0.05	0.03	0.02	0.02	0.03	0.04
Ghana	0.07	0.01	0.03	0.02	0.04	0.04	0.07	0.15
Guinea	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.01
Niger	0.05	0.01	0.00	0.00	0.00	0.01	0.03	0.07
Nigeria	1.18	0.58	0.48	0.33	0.96	0.29	0.38	0.53

Source: Compiled from UNCTADstat online.

Appendix 2. Definitions of Variables

FDI = net inflows, in billions USD.

Business rating = CPIA business regulatory rating (1=low to 6=high). It assesses the extent to which the legal, regulatory and policy environments helps or hinder private businesses in investing, creating jobs and becoming more productive.

Macro rating = CPIA macroeconomic management rating (1=low to 6=high). It assesses the monetary, exchange rate, and aggregate demand policy framework.

Transparency rating = CPIA transparency, accountability, and corruption in the public sector rating (1=low to 6=high). Transparency, accountability, and corruption in the public sector assess the extent to which the executive can be held accountable for its use of funds and for the results of its actions by the electorate and by the legislature and judiciary, and the extent to which public employees within the executive are required to account for administrative decisions, use of resources, and results obtained.

Oil_production dummy = the value is 1, if the country is oil producers; 0 otherwise.

GDP = gross domestic product in constant USD. *World Development Indicators*, Online.